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ABSTRACT

This document contains the following papers on social studies from the SITE (Society for Information Technology & Teacher Education) 2002 conference: (1) "Technology Portfolios in Pre-Service Social Studies Teacher Education" (Marsha Alibrandi); (2) "North Carolina's Sixth Graders Go to Russia: A Global Education/Curriculum Integration Project that Redefines the Virtual Field Trip and Makes Social Studies Education in a Technology Enabled Environment Meaningful and Exciting" (Candy Beal, James Clark, Amanda Robertson, Bill Beal, Pru Cuper); (3) "The Ethical, Cultural and Societal Issues of Technology Implementation: The Role of the Social Studies" (Michael J. Berson); (4) "Pedagogical Ethnotechnography: A Study of the Impact of Information Technology as a Pedagogical Tool on the Attitudes of Preservice Social Studies Middle School Teachers" (Prince Hycy Bull); (5) "Social Studies, Lesson Development, and Genealogy" (Mary Jane Ford and others); (6) "Using Web-Enhanced Problem-Based Learning in Teacher Education" (Susan Gibson); (7) "Social Studies and Technology: Teachers' Perceptions of Effective Integration" (Tina Heafner); (8) "Information Technology, Constructivism, and Social Studies Teacher Education" (David Hicks, Peter Doolittle, John Lee); (9) "Engaging in Scholarly Dialogue: CITE Journal and the Social Studies" (John K. Lee, Michael Berson, David Hicks); (10) "Use of Digital Historical Resources in a Large Urban School System" (John K. Lee and David Hicks); (11) "Issues in Alaska Native Education" (Ann H. McCoy and Paul Ongtooguk); (12) "The Design and Development of an Interactive Web Site for Teaching and Learning about American History" (Sara McNeil, Steven Mintz, Cameron White); (13) "Integration of Technology in Elementary Social Studies Teacher Education: Adapting a Curricular Model" (Jeff Passe and Tracy Rock); (14) "Real History: Using Multimedia Software To Introduce Historic Events and Promote Constructivist Principles in Secondary Social Studies Classrooms" (Beverly B. Ray); (15) "Linking History, Technology and Teacher Education: The Allen Parker Slave Narrative" (Joy Neal Stapleton and Joyce Joines Newman); (16) "A Model of Professional Development for History Teachers: Technology Supported Discourse To Support Action Research on Technology Supported Discourse" (Elizabeth Wellman and Jana Flores); and (17) "History Education Online: A Critical Analysis through Focus Groups" (Cameron

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White and Tony Talbert). Summaries of conference presentations on handheld computers and digital image editing are also included. Most papers contain references. (MES)

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Social Studies (SITE 2002 Section)

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SOCIAL STUDIES

Technology Portfolios in Pre-Service Social Studies Teacher Education

Marsha Alibrandi

A state-mandated technology portfolio required for initial licensure has changed the lives of Social Studies Methods Educators. North Carolinian Social Studies professors meet the challenge in various ways. This case study investigates the types of adaptations made to accommodate the new requirement. As digital archives, lesson plans, webquests, geographic and Census information become available through Internet sources, how are today's initially-licensed teachers being prepared to meet challenges of integrating technology across the social studies?

Since 1999, the North Carolina Department of Public Instruction has required a Technology portfolio for initial teacher licensure. For students earning a license as part of an undergraduate degree, this means that during the 'professional semester,' or the semester of the student teaching practicum, the student must design, implement and field test digital portfolio products developed within the Methods class.

Professor A:
In a one-semester combination of Methods and student teaching, how, when and where are the appropriate practice and tools integrated into the pre service course? Over a three year period, refinements to a computer lab component have resulted in the development of more streamlined lessons, tools and products. The dilemma a teacher educator faces is, "What gets left out of the Social Studies Methods curriculum?

One successful practice has been to add a computer lab component to the Methods class. Meeting on Fridays afternoons from 3:30 to 5:30, the computer lab component is amazingly well attended. Research on prior skills of the students revealed that many have never used the Internet to search for lesson plans or student activities, most had never designed or mounted a website, a few had used some of the functions of PowerPoint, and none had heard of WebQuests.

Discrete lessons are sequenced and presented weekly during the Friday labs. The first four weeks introduce new skills; one each week. Students have collaborated in co-designing the lab components. The four components are:

1) Boolean searches for finding Social Studies lesson plans, student activities, simulations, role plays, web quests, maps, digital archives and other useful Internet resources. Students are generally unaccustomed to using Boolean search strategies prior to this introduction.
2) The WebQuest on WebQuests at the Filamentality website. Students are assigned to develop a WebQuest using a self-guided worksheet developed by a prior student.
3) Power Point: Features and functions of Power Point are introduced in the first hour, and a 6 slide product is required by the end of the second hour in which images are imported, sound and slide effects are demonstrated.

4) Web site development. With a former student lab assistant, a one hour step by step tuorial was developed to assist student to design a website with additional pages and links and images.

Subsequent Fridays (of which there are only four and students often stay after class to work on their products), additional effects, enhancements and techniques are added, but primarily this is lab time for the design and development of the products. The website component is now available on the web at:
http://www.ncsu.edu/ced/clt/workshops

Students indicated in reflections on their prior knowledge that their skills were generally undeveloped. For example, several were learning for the first time that multiple windows could be open and in use, many had never imported an image, and most had never used the sound or slide effects in PowerPoint. None of the undergraduate students had ever developed a web page. Note that these students began matriculating in 1998.

Professor B:

In a Middle School Social Studies class, the introduction and co-construction of a virtual field trip was designed to develop curriculum-appropriate products in line with the middle school Social Studies curriculum which introduces the major world regions of the Americas (grade 5); The Eastern Hemisphere: Europe and the former Soviet Republics (grade 6); Africa, Asia and the Pacific Realm (grade 7) and North Carolina and the World (grade 8).

With assistance from Instructional Technology specialists who join the Methods class to co-construct virtual field trips with pre service middle school teacher candidates. Over a semester-long double methods course (Social Studies and Language Arts), the students spend one and one half hours per week preparing their technology portfolio products. Instruction in Hyperstudio and DreamWeaver prepare the candidates for the virtual field trip products they are assigned to create are to enhance the curriculum they will teach in their student teaching practicum sites in the following semester.

In each of these settings, the curriculum is the driving force behind what products the students will develop. Several of the middles school products are mounted at the www.ncsu.edu/clt website. In the high school Methods class, students mount WebQuests at the Filamentality site or in university web space, mount their webpages either at the university or at their practicum site schools, and several developed activities for high school students that require the development of PowerPoint presentations.

From shared constructivist theoretical perspectives, the integration of technology and computer skill development is grounded in the target curriculum. To demonstrate best practice and 'seamless' technology integration, computer lab components are collaborative endeavors that use student skills as the basis of cooperative learning.

North Carolina's Sixth Graders Go to Russia: A Global Education/Curriculum Integration Project that Redefines the Virtual Field Trip and Makes Social Studies Education in a Technology Enabled Environment Meaningful and Exciting

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Abstract: This project traces the three year development of preservice teachers' global technology projects from the after- the- fact journaling accounts of a research trip to Russia to a year long research study about Russia involving hundreds of sixth grade students, their teachers, a university research team and preservice teacher education students. Sixth grade students and their teachers involved in the final year of the project used a curriculum integration teaching and learning approach to study Russia. The students' ability to recall discrete facts and engage in reflective thinking as well as both teachers' and students' attitudes about learning using this approach were measured.

This paper discusses the preliminary results of a project that examines the effectiveness of using the curriculum integration approach for teaching and learning in a technology enabled environment. The overall project that used Russia as its focus began in 1997 with a professor's research trip to Russia to study Russian education, specifically teaching and learning approaches used in middle grades. The project evolved from a single professor researching to preservice teacher student involvement. Students accompanied the professor to Russia, taught classes and observed in Russian schools, pre K-college. While in Russia, the college students journaled back information via the Internet about the country, culture and education. Colleagues and middle school students following the trip in the United States were fascinated by the accounts, but were disappointed that they were unable to ask questions of the travelers. In an effort to satisfy the demand for home-bound students and teachers to play an interactive role in the research in Russia, the most recent version of the research trip was built to maximize involvement by sixth grade classes.

The 2002 Great Adventure to Russia Project (www.ncsu.edu/chass/extension/russia-nc6) was developed as an experience that used a curriculum integration approach to teaching and learning in a technology enabled environment. Researchers sought to determine if, by using the curriculum integration approach to teach early adolescents about Russia, students were able to both recall discrete facts and practice reflective thinking. Attitudes about learning and teaching were also examined.

In September of 2001, the project enrolled forty sixth grade classes interested in studying Russia. It took the classes through the months of preparation for an actual trip to Russia in February. Students were part of the home-based research team and took the trip virtually.

Briefly: In the fall and winter middle school classes received Internet Postcards From Russia, met the NC State traveling student research team on line, and logged on to offer suggestions about what to pack to survive sub-zero weather and what gifts to bring to host families. In late November, sixth graders posted 500 questions for the team to research while in Russia. Three hundred questions were selected to be answered. One half of the questions would be answered by team members interviewing Russian students and parents and the remaining 150 questions

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could be answered through general knowledge of the professor researcher. To coincide with the trip, teachers would teach a unit about Russia that was prepared using a technology enhanced curriculum integration format driven by the students' research questions. While on the trip to Russia, the traveling research team would send home daily reports, pictures and interviews conducted with Russian school children. The home-based sixth grade teams researched Russia and supplemented what they learned with information from the field, sent back via the web. Students completed their study of Russia by sharing their research projects. This activity enabled all of the students to know the information gathered about the classes' questions. The final stage of the project provides for teachers and students from around the state to come together to report their project findings at a Global Connections Conference at NC State University in May.

As of late December we have discovered the following:

$ Postcards From Russia have generated a great deal of excitement in the classrooms. Reports from teachers tell of students racing to computers to pull up the most recent card in order to answer the mystery question included in each card. Children beg for research time to discover the questions' answers and learn more about Russia. Because few of the children had little knowledge of Russia before the project, we have determined that the information on each postcard has elevated the level of learning for all of the students. This is evident in the complexity of the 500 questions that we have received. Many of the questions are sophisticated and indicate a deeper level of knowledge about Russia. We believe this to be an example of Vygotsky's (Vygotsky, 78) scaffolding principle. Students' level of knowledge can be raised if new information is introduced incrementally.

$ High interest in social studies has been generated through the game board homepage, the postcards, the mystery game, Teachers Talk pages, etc.

$ By submitting research questions, students report they have felt empowered to be able to direct their own study of Russia.

$ Teachers are heartened that university researchers are examining how students learn best. They have reported back that interest and support of their classroom efforts is empowering.

$ Teachers are willing to incorporate technology into their classroom, especially if it can be accomplished seamlessly and in support of the overall lesson.

$ Interest in a topic can be gradually built through high interest touchstones.

As of this writing, teachers have yet to teach the unit, but students are already doing informal research on their questions. This indicates that once excited about a topic, early adolescents want to continue their learning. They are eager to add their input to the learning process, as evidenced by the 500 questions. If they seek to answer their own questions they are that much more motivated to research.

This ambitious project researches teaching philosophy and approach, examines how we believe students learn best, and shows the scope of what can be taught in a technology rich environment. It emphasizes the need to imagine and act on the possibilities teachers have if they dare to develop and dream in a technology enabled environment.

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THE ETHICAL, CULTURAL AND SOCIETAL ISSUES OF TECHNOLOGY IMPLEMENTATION: THE ROLE OF THE SOCIAL STUDIES

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Abstract: This paper describes the integration of social, ethical, legal and human issues surrounding technology into social studies instruction. The cornerstone of this work is the promotion of participatory citizenship by evolving a culture of caring online. The emphasis of this work is on the dissemination of constructive solutions and a plan of action for the social studies, which fosters protective and productive online learning experiences for children and youth.

The Internet provides an extraordinary tool for enriching teaching and learning in the social studies; yet, safe and productive participation in cyberspace necessitates the ability to make informed decisions and apply online critical thinking skills. Internet safety encompasses those initiatives which mediate the online experiences that are disadvantageous to a child's physical, cognitive, and socio-emotional functioning. The recognition of threats to children in cyberspace is an important first step in developing constructive solutions and a plan of action which fosters protective and productive learning experiences. Through the social studies, the opportunity to foster the social and emotional skills of young people in cyberspace can be integrated into civic education with an exploration of the ethical, cultural and societal issues related to technology implementation. Social studies citizenship concepts are integrally linked to the ISTE National Education Technology Standards for Teachers and Students which promote cybersafety. This paper will describe an overview of a project to engage social studies educators and students in an exploration of critical social issues and public problems in cyberspace.

Pedagogical and Research Aims of Project

The Internet serves as a powerful medium for education, entertainment, information retrieval, and communication; however, cyberspace also may transform the nature of social interactions among youth. Whether these changes are beneficial or problematic may depend on the influence of parents, teachers, and peers whose guidance may assist students in making informed decisions and allow them to demonstrate an ability to apply online critical thinking skills and productive social participation. Issues of accountability, responsibility, tolerance, and respect-- topics which are often addressed in the social studies curriculum-are critical to counter exposure to hate, violence, misinformation, consumer exploitation, and sexual predators in cyberspace.

In the social studies, exploration of the ethical, cultural and societal issues related to technology implementation is an extension of participatory citizenship with a focus on engaging educators and students in a dialogue about emerging social implications of technology. Thematic strands in the social studies which address participatory citizenship include: Power, Authority and Governance; Global Connections; and Civic Ideals and Practices. As teachers become interested in developing curriculum and experiences for their students, educators often recognize that they need to broaden their own knowledge and understanding as well. Social Studies teachers can bring these perspectives into the classroom by accessing online materials and promoting cyber-interactions, which can be useful resources for making connections within the classroom and fostering informed and active participation in the global community.

Identifying linkages between civic action in the social studies and national technology standards provides a basis for emphasizing Internet safety in the social studies classroom. ISTE has recognized that reliance on technological

resources and expansive communication networks must be accompanied by greater attention to and awareness of the repercussions to peoples and nations. They have developed National Educational Technology Standards (NETS) for teachers and students which promote responsible and safe use of technology resources.

Program Goals and Objectives

This initiative models active participation in a multidisciplinary, community-oriented intervention effort which engages educators and students in a dialogue about critical social issues and public problems. The cornerstone of this work is the creation of safety for vulnerable children and the advancement of advocacy efforts by parents, schools, and communities to evolve a culture of caring online. In the context of the social studies curriculum, students and educators can explore the social, ethical, legal and human issues surrounding technology.

This project focuses on disseminating constructive solutions and a plan of action for the social studies, which fosters protective and productive online learning experiences for children and youth. The overall goal is to disseminate information in the social studies to promote technology learning experiences which are protected and optimize students' skills in participatory citizenship and global connectivity via cyberspace. Moreover, this project explores challenges and potential solutions for mobilizing and coordinating the transfer of technology safety innovations across instructional settings.

Objectives

The outcomes of this research include a clarification of policies and practices that may contribute to safety for children online. The objectives of the project are:

- To discuss teachable moments in the social studies curriculum that foster safe practices online and facilitate the application of critical thinking skills for responsible decision making
- To clarify future directions in technology applications which necessitate awareness and education on cyberethics within social studies classrooms
- To inform preservice teachers about Internet safety issues and instructional applications which promote social studies citizenship skill development as a nontechnical approach to protecting children in cyberspace
- To promote critical and active users of digital information who consider the authority, bias, and currency of the available information
- To identify barriers to educators' effective integration of online safety practices

Collegiality in Project Development

The ability of schools and universities to overcome many pressing challenges, including the pressures of curriculum standards and intensified assessment requirements, ultimately rests with schools shedding their identity as isolated institutions. As we seek new perspectives and insights, it is critical that we anticipate the school of the 21st century in which interdisciplinary and interprofessional collaboration is an established mechanism for meeting the needs of students. This is a key component of the Internet safety action plan which has been developed. Ultimately, this exchange may create the potential for educators to access their untapped resources and discover the richness of their strengths for advancing powerful teaching and learning while preparing children and youth for safe online experiences.

This project conceptualizes schools and universities as prosocial support systems for children and families in which educators are active participants in multidisciplinary, community-oriented intervention efforts. The project builds on a University of South Florida (USF) community-wide initiative which focuses on Internet safety for children in the Tampa Bay area. The Advisory Committee for the USF project includes collaboration among an interdisciplinary group of professionals from K-12 schools, law enforcement, mental health agencies, public libraries, child protection agencies, child abuse organizations, Internet safety advocacy organizations, and university researchers in education, children's mental health, and trauma. This initiative also draws on evolving knowledge through collaboration with researchers throughout the nation and around the world who are similarly dedicated to fostering safe practices online in conjunction with teachers and caregivers.

Pedagogical Ethnotechnography: A Study of the impact of Information Technology as a pedagogical tool on the attitudes of Preservice Social Studies Middle School Teachers

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In February 2000, the United States Department of Education realizing that there was a critical need to integrate technology in teacher education programs and teaching, issued this challenge to all higher educational institutions to integrate technology as a pedagogical tool.

Purpose of study

The purpose of this research is to study the impact of information technology as a pedagogical tool:

- On the attitudes, self-efficacy and practices of preservice middle school social studies teachers toward technology information;
- To analyze how effectively information technology is integrated and modeled in the course;
- To identify factors that enhanced their practices in using information technology.

Theoretical framework

Two theoretical frameworks guide this study: social cognitive theory and constructivist learning theory. The social cognitive theory states that behavior, cognition and environment co-exist in a reciprocal relationship and thereby influence each other. Self-efficacy is a central theme of social cognitive theory. It states that a person's belief in performing a behavior or a task can lead to the successful completion of the task (Bandura, 1986).

The second theoretical framework guiding this research is constructivism. Constructivist theory states that students' experiences, collaboration and self-construction of knowledge is relevant to instruction. According to the National Council for Education Statistics (NCES, 2000), report on teachers' use of technology, for each classroom instructional activity, teachers who reported feeling well prepared or very well prepared were more likely than teachers who reported feeling unprepared to assign students to use various technologies.

Teacher Education Programs and Information Technology

According to Gunter, Gunter and Wiens (1998), instructors need to strive to light a fire and motivate preservice teachers to understand the influence educational technology can have in their lives and classrooms. In a 1998 survey of 416 Colleges of Education, the International Society for Technology in Education (ISTE, 1999) concluded that teacher-preparation programs were not giving preservice teachers the needed training to integrate technology into their teaching. Green (1999) reiterated the view that there was enough evidence to suggest that one of the greatest challenges for college and university faculty was integrating technology into their instruction.

Social Studies and Information Technology

The teaching of social studies is no exception to the limited use of information technology in instruction. It was this limited use of information technology in social studies that led Martorella (1997) to assert that, " technology is a sleeping giant in the social studies curriculum" (p.511). If technology is a "sleeping giant," then, who is going to wake the sleeping giant and how effective will the giant be upon waking? This researcher argues that part of the answer to the first question can be found in the curriculum of teacher education programs and the answer to the second half of the question depends on how effectively technology-trained preservice teachers integrate technology on becoming In-service teachers.

According to White (1999), the integration of technology in social studies provides opportunities to empower students and teachers and facilitates a constructivist approach. The traditional approach to social studies has been teacher centered with lecturing, reading texts, and taking tests. The transformative constructivist approach, as defined by the National Council for the Social Studies (1994), stressed the importance of technology integration at all levels of social studies education by focusing on teacher education programs as a starting point.

Preservice Social Studies Teachers and Information Technology

According to the research on effective social studies teaching, White (1999) stated that effective teaching and learning takes place when preservice social studies methods courses use the transformative approach. According to White, the transformative approach reflected the constructivist approach to teaching and learning, which included modeling and applying, reflecting, collaboration (Vannatta and Beyerbach, 2000), and developing an interactive community of learners (White, 1999; NCSS, 1994).

The goal of every teacher education program and every methods course in social studies in integrating technology is to integrate technology within the curriculum rather than teach it in isolation (Mason et al. 2001). According to Halpin (1999), the integration of technology across the teacher education curriculum provides preservice teachers with an explanatory and discovery oriented environment enhancing their abilities to use different computer applications for instructional purpose. Halpin states that the use of technology facilitates a problem-solving environment, a tenet of constructivist theory, with the goal to motivate students to seek information and solve problems. Keiper, Harwood and Larson (2000) state that integration of technology-enabled teaching and learning enhances social studies instruction in K-12 classrooms and makes lessons exciting for the teacher and the students. According to Partee (1996), the integration of electronic communication in teacher education programs not only provided an alternate environment but also extended the boundaries of the traditional classroom. Electronic communication through email (Hall, 1993) and Newsgroups (Lempert, 1995) provided alternate communication for classroom participation and peer support during student teaching.

Research Questions

Research questions and hypotheses will be used to understand the impact of technology information as a pedagogical tool on the attitudes, self-efficacy and practices of preservice middle school social studies teachers.

1. How effectively is technology integrated in the middle school social studies methods course?
   - What is the effect of using electronic forum as a pedagogical tool on the attitudes of preservice teachers towards information technology?
   - What is the effect of using synchronous e-chat as a pedagogical tool on the attitudes of preservice teachers towards information technology?
   - What is the effect of using asynchronous email/listserv as a pedagogical tool on the attitudes of preservice teachers towards information technology?
   - What is the effect of using the Internet as a pedagogical tool on the attitudes of preservice teachers towards information technology?
2. What are the pretest and posttest attitudes of preservice middle school social studies teachers toward technology information (Electronic mail, WWW, Multimedia, Teacher productivity and student productivity) in the social studies methods course?

Methodology

Participants

1. Participants are 10 middle school social studies preservice teachers currently enrolled in a social studies methods course at a large research based southeastern university. Participants were purposefully selected for this study. WebCT is used in this research as the web-based pedagogical medium guiding information technology integration in the course. Web CT is a web-based flexible, integrated pedagogical tool designed to foster inquiry, encourage discourse and inspire collaboration between instructor and students, and students and students.

Pedagogical ethnotechnography

This research employs the use of a "pedagogical ethnotechnography" method of research developed by this researcher. This researcher defines a "pedagogical ethnotechnography" method as a study of technology as a pedagogical tool as experienced by stakeholders- students, teachers, or school administrators - within an educational realm with an empirical analytic paradigm, within a defined boundary set by the empirical analytic paradigm. Pedagogical ethnotechnography utilizes both qualitative and quantitative methods.

Qualitative Analysis of Data

1. The qualitative data is collected through forum, email, and e-chat databases, classroom observations and group interviews. The qualitative data will be coded and analyzed using Glaser's (1978) constant comparative methods.

Although the constant comparative method is presented as a series of steps, the process when practically applied is non-linear, goes on all at once and the analysis keeps doubling back to more data collection and coding, (Brogdan and Bilken, 1998).

Quantitative Analysis of Data

The Independent variable is the use of information technology through WebCT to positively influence student's attitude towards information technology as a pedagogical tool. The dependent variable is students' attitude scores of Teachers' attitudes Towards information-Technology Scale (TAT). A t-test of independent samples will be conducted for the five part index – Electronic mail, WWW, Multimedia, Teacher productivity and student productivity - means (pre and post test) at the alpha level equal to .05 to test for a significant attitude towards information technology as a pedagogical tool. According to Knezek and Christensen (1998), the internal consistency reliability estimates for the five scales on the TAT - Electronic mail, WWW, Multimedia, Teacher productivity and student productivity - range from .93 to .96.

Preliminary findings

Initial review of data show that there is some positive attitude by preservice teachers toward information technology as a pedagogical tool, especially in the teaching of middle school social studies:

- Overall, students feel that technology can enhance lessons but there are inherent dangers in using technology in instruction, such as supervision of students.
- Students also recognized that use of technology as a pedagogical tool is a collaborative effort in which teachers and students learn from each other.
- Students are also concerned about the effects of the "digital divide" on student's learning outcome outside of the school.

The initial findings from the qualitative analysis seem to be leading to positive preservice teachers attitudes toward technology information as a pedagogical tool.

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Social Studies, Lesson Development, and Genealogy

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Abstract: This presentation will explore the use of genealogy software in developing social studies lessons to address NCSS and state content standards using students' natural curiosity about individuals, families, and ancestors. Genealogy software programs and lessons incorporating this type of software will be discussed. In a project as part of two graduate technology classes, inservice teachers collaborated to develop lessons based on national and state content standards designed around the use of a genealogy software program.

Introduction

Social studies and technology seem made for each other. Almost any software package or application can be integrated into the instruction of social studies concepts. Some authors have questioned the value of technology use in instruction in general and social studies instruction in particular (Shaver, 1999). Shaver (1999) points out that often the effects of the technology as the medium are confused with the effects of the content and the methodology of instruction. On the other hand, Schwartz and Beichner (1999) maintain that although the social studies classroom may, at first glance, appear to be the same as it was 20 years ago, technology has had a positive effect in many social studies classrooms. They also assert that the inclusion of computers in the teaching of social studies is mandated for several reasons: (a) computers are one of the most powerful influences in society today; (b) good teaching today looks like good teaching of the past, but today's technology makes good teaching more accessible; (c) today's social scientists rely heavily on computers, requiring that students be exposed to these methods used by social scientists; and (d) the Internet makes possible global connections and interactions that can have a profound effect on students.

The National Council of the Social Studies (NCSS) offers as one of its ten themes "Science, Technology, and Society" which addresses the concept that modern life would be impossible without technology (Roblyer & Edwards, 2000). To understand the effect of technology on society, one must understand and use the technology itself.

Social studies instruction provides opportunities to use a variety of software. Software which allows teachers to develop lessons that promote open-ended learning environments can be invaluable in the social studies classroom. Open-ended learning environments such as problem-based learning (Morrison, Lowther, & DeMeulle, 1999) and mindtool learning activities (Jonassen, 2000) can be utilized in lesson development using software that is designed for non-education uses. *Family Tree Maker*, a genealogy package, is one such program.

Delving into family history has great allure for learners of all ages. Genealogy has been used successfully to understand cultural backgrounds (Simon & Simon, 1978), to develop skills in the use of library resources (Southwick, 1985), to promote family awareness and intergenerational communication (Allen, 1987), and as a motivational tool for middle grade students (Fielder, 1985). The marriage of genealogy and technology, through genealogy software and the Internet, appears to be the next logical step in the exploration of this beguiling topic.

Goodlad (1984) found that the range of instructional practices used by classroom teachers is narrow: "They lectured, monitored seatwork, and engaged in activities requiring only rote learning" (p. 298). Few instructional activities required or encouraged active learning, and the most often observed instructional group is the whole class (Goodlad, 1983). Factors that contribute to this limited repertoire of teaching strategies, as suggested by Goodlad (1984), include the following reasons. First, society does not pressure schools to change these instructional practices, since they reflect the conventional wisdom about how classrooms should be conducted. Second, these are the ways in which teachers themselves were taught from their days in elementary school through college. Third, preservice teacher education programs are of insufficient depth to successfully counter the conventional wisdom about teaching and classroom learning.

Present teacher education programs are in a position to counter the conventional wisdom about teaching and classroom learning. By engaging preservice and inservice teachers in in-depth research and development of problem-based learning activities, teacher education programs are better able to impact the quality of instruction in K-12 classrooms. The activities discussed in this paper were designed to provide for teachers the kinds of learning experiences that will ultimately benefit their own students.

Genealogy Software

Genealogy software is abundantly available, ranging from simple database type programs that are available as freeware or shareware to complex multimedia programs costing over $100. Genealogy freeware is readily available as free downloads on the Internet while some of the more expensive commercial versions have downloadable trial copies. The software is available for the PC or the Macintosh platforms with several outstanding programs available for both. Lists of genealogy freeware can be found at http://www.gensearcher.com

The Internet supplies a plethora of websites that provide information and assistance in genealogical research. Many of the genealogy programs have websites that provide access to major genealogical resources such as war pension lists, U. S. Census records, and Social Security death index. Several outstanding genealogy packages include the basic genealogy software, CD-ROM databases of information, and Internet websites with access to genealogical resources.

Several websites (i.e., www.familychronicle.com/software.html) provide reviews of various genealogy packages; one site (www.mumford.ab.ca/reportcard/) provides a report card that compares 15 of the packages on 12 items. The report card is based on scorecards of each of the items for each package. These reviews and comparisons assist the teacher in selecting the most appropriate genealogy software for lesson development.

Broderbund's *Family Tree Maker* was selected for use in the lesson development activities for several reasons (a) the level of experience required to use the features of the program is considered intermediate which would make the learning curve manageable, while providing access to a program with powerful features; (b) its excellent website (www.familytreemaker.com) provides powerful support for activity development; and (c) its multimedia capabilities allow the inclusion of photos and sound.

The Project

One way of understanding the uses of technology in today's society is to experience its impact in project-based learning. The use of genealogy software combines the use of a dedicated database program with the power of the Internet and the storage capabilities of CD-ROM. Two of the ten NCSS themes address the individual and individual development and identity. Genealogy software provides an excellent vehicle for developing some very important and powerful concepts about the individual.

Students in two graduate technology courses were taught the use of Broderbund's *Family Tree Maker* and then were required to develop lessons utilizing the software. Students worked collaboratively on these

lessons. These inservice teachers taught various grade levels from elementary to secondary; the content areas of the secondary teachers included all subjects. Therefore, the collaborative groups were encouraged to create interdisciplinary connections in the lessons they developed and to address all related content standards. Although the lessons included various subject areas, the preponderance of lessons dealt with social studies issues as the major focus of instruction.

Social Studies Content Standards

According to Parker and Jarolimek (1997), social studies content standards should serve as a framework for K-12 social studies program design, serve as a guide for curriculum decisions by providing performance expectations for all students, and provide examples to guide teachers in lesson development. Louisiana and many other states require that classroom teachers connect instructional objectives and activities to benchmarks that represent student performance expectations. The use of genealogy software in the K-12 setting lends itself naturally to the accomplishment of the following historical thinking benchmarks and foundation skills that were developed by the Louisiana Content Standards Task Force.

Louisiana History Content Standard
(www.doe.state.la.us/DOE/assessment/standards/SOCIAL.pdf)

Standard: Students develop a sense of historical time and historical perspective as they study the history of their community, state, nation, and world.

Historical Thinking Skills (K-4)

- Demonstrating an understanding of the concepts of time and chronology
- Recognizing that people in different times and places view the world differently
- Identifying and using primary and secondary historical sources to learn about the past

Historical Thinking Skills (5-8)

- Describing chronological relationships and patterns
- Demonstrating historical perspective through the political, social, and economic context in which an event or idea occurred
- Analyzing the impact that specific individuals, ideas, events, and decisions had on the course of history
- Analyzing historical data using primary and secondary sources
- Identifying issues and problems from the past and evaluating alternative courses of action
- Conducting research in efforts to answer historical questions

Historical Thinking Skills (9-12)

- Applying key concepts, such as chronology and conflict, to explain and analyze patterns of historical change and continuity
- Explaining and analyzing events, ideas, and issues within a historical context
- Interpreting and evaluating the historical evidence presented in primary and secondary sources
- Utilizing knowledge of facts and concepts drawn from history and methods of historical
- Inquiry to analyze historical and contemporary issues
- Conducting research in efforts to analyze historical questions and issues
- Analyzing cause-effect relationships

Louisiana Foundation Skills

The following foundation skills apply to all students at all grade levels in all disciplines.

- Communication
- Problem Solving
- Resource Access and Utilization
- Linking and Generating Knowledge
- Citizenship

The Lessons

All lessons were designed to incorporate the Louisiana History Standard and its accompanying benchmarks that focused on the Historical Thinking Skills for grades K-12 as described above. Included within the latter were benchmarks relating to the historical impact of specific individuals or events, analyses of primary and secondary sources, and research endeavors based on historical questions. Many of the lessons addressed additional social studies benchmarks related to geography and civics standards. Other subject area standards enhanced the lessons by providing interdisciplinary connections.

Lesson plan topics were grouped into three broad categories: family relationships and genetic traits, family histories of famous Americans, and family histories of participants in famous events. Some plans were designed with novice genealogists in mind and were based on family group records and pedigree charts. Other plans provided experiences for more advanced learners and incorporated timelines of important events and graphic organizers. All participants designed a rubric for evaluation. Technology performance indicators included the use of logical thinking programs, writing and graphic tools, and the use of digital cameras and web tools.

Learning activities were tied directly to the state standards and benchmarks. For example, a lesson based on the family history of President John F. Kennedy was developed. The state content standard was *History: Time, Continuity, and Change. Students develop a sense of historical time and historical perspective as they study the history of their community, state, nation, and world.* The benchmark was *Describing chronological relationships and patterns*, and the learning activity, using *Family Tree Maker*, provided opportunities for students to create a Kennedy Family Group Record and a Kennedy Pedigree Chart. A later activity based on the Group Record and Pedigree Chart included the creation of a timeline of Kennedy family events, using illustrations, magazine articles, or Internet photographs.

Conclusion

The instructional use of genealogy and technology can lead to a richer, deeper teaching and learning experience for those involved in social studies education. Teachers should use software like *Family Tree Maker*, a program not originally designed for educational purposes, to create problem-based learning experiences for K-12 students. This type of teaching can address some of the criticism of narrow, teacher driven instruction through the motivating nature of both the topic and the medium. In this way, someday the comment "teachers teach as they were taught" will have positive implications.

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Using Web-Enhanced Problem-Based Learning in Teacher Education

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Abstract: Integrating computer technologies into preservice teacher education programs is critical if future teachers are to become effective users of these technologies in their own teaching. However, preservice teachers need to be challenged to rethink traditional instruction when considering how best to use these technologies. One possibility for integrating computer technologies into teacher education courses in a non-traditional way is through a constructivist, problem-based learning approach. This paper is a report of one instructor's experiences with this approach through the use of a virtual field trip to an elementary school in a social studies curriculum and instruction course. Students were interviewed and surveyed about their course experiences with the virtual field trip. Findings indicated that students constructed a better understanding about the teaching of social studies as well as gaining more confidence and competence with the integration of computers into their teaching as a result of their course experiences.

Introduction

Most teachers graduate from teacher education institutions with limited knowledge of the ways technology can be used in their professional practice (Wetzel & Chisholm, 1996). Few preservice teachers have any instruction in actually using technology in the classroom (Vagle, 1995), and yet, being able to effectively apply technology is high on the list of what beginning teachers should know and be able to do in today's classroom (Kortecamp & Croninger, 1995). Integrating technology in teacher education programs is a necessity in order that preservice teachers are able to see the importance of developing and using computer-based lessons in their own teaching (Wiburg, 1991). "Preservice teachers need to perceive computers as integral parts of the instructional strategies and professional activities of teachers and become committed to their use" (Woodrow, 1993, p. 373). However, merely exposing students to technology is not sufficient. They need computer experiences that help them to rethink traditional instruction rather than simply using computers as an add-on to that instruction (Barron & Goldman, 1994; Heterick, 1996).

One possibility for integrating computer technologies into teacher education courses in a non-traditional way is through a constructivist, problem-based learning approach. According to Cameron White (1995), "A constructivist process orientation to teacher education is essential if we are to encourage students to develop problem solving and critical thinking skills and to apply, analyze, synthesize and evaluate knowledge, skills and attitudes" (p. 290). Computers can be effective vehicles for introducing problems for student investigation because they "allow students to experience a shared context in which they engage in sustained thinking about complex problems and engage in interpretive learning experiences" (Barron & Goldman, 1994, p .84). A key characteristic of problem-based learning is that the learning should be situated in the examination of authentic, real-life problems of relevance to the learner (Duffy & Cunningham, 1996). Using the computer in this way provides authentic examples and problems of education from real classrooms, thereby heightening students' appreciation of the realities of teaching practice (Downs & Rakestraw, 1997).

In this paper, I describe a constructivist, problem-based learning approach that I have developed for use in an undergraduate teacher education course. The course is delivered by means of a web enhanced, interactive, virtual field trip to a local elementary school.

Description of the Virtual Field Trip Experiences

Using WebCT, I designed a web-based virtual field trip to an elementary school as a learning tool for an undergraduate social studies curriculum and instruction course offered as part of a teacher education program at a large university. My goals for the course were both to expose my students to ideas for integrating technology into their teaching and to assist them in clarifying their roles and responsibilities as social studies teachers.

The virtual field trip is organized around five key problems about teaching social studies from actual classroom practice. These key problems are:

- Why is social studies taught in elementary schools?
- How do you choose content and plan for instruction in social studies?
- What resources are available to support your teaching of social studies?
- What approaches to social studies teaching would best help you to meet your goals? and,
- How do you assess children in order to enhance their learning in social studies?

My students use a variety of multimedia experiences provided through the virtual field trip to assist them in the investigation of these five problems. Through the virtual field trip, they are given the opportunity to look at each problem from a number of perspectives, including teachers, children, peers, the curriculum and social studies experts. Students can listen to interviews with teachers, children and other student teachers in which they talk about social studies; view videoclips of social studies classrooms "in action"; examine lesson plans, curriculum guides, samples of children's work and other school-related artifacts; hear from social studies experts across the country; and, interact online with each other and myself using the WebCT conferencing tool. As a way of authenticating the virtual field trip experiences, students can also take a virtual tour of the school building, listen to a welcome message from the principal, view samples of teachers' weekly timetables and examine the school handbook.

Two weeks of this 13-week course are spent examining each one of the five key problems specifically. Students have one face-to-face seminar and one class in the computer lab each week. During the lab sessions, students work independently selecting, collecting and synthesizing the information presented on the virtual field trip. After examining each problem using the virtual field trip, we share their experiences and discuss their ideas in small group and large group sessions during the weekly face-to-face seminar. At the end of the two-week period, students write a reflective synthesis paper in which they discuss their learning about the specific problem under investigation based on their web and seminar experiences. We then move to the next problem and repeat the pattern until we have completed all five of the problems.

A major assignment for the course offers interested students the opportunity to design their own learner-centred, computer-based project for a specific grade and social studies topic from the elementary school curriculum guide. A variety of formats are possible including: Hyperstudio multimedia projects, web quests, web activity pages, virtual field trips, and Internet treasure hunts, among others. Since the majority of my students have limited computer skills, they are encouraged to work in pairs or small groups to capitalize on each other's computer experience. A lab assistant offers further help and extra lab time is booked outside of class time to allow students to practice newly acquired skills. Weblinks to tool training sites are provided on the virtual field trip site as well for students to learn how to use the tools on their own. As a culminating activity, students share these computer projects in presentations to the class.

Student Feedback on the Virtual Field Trip

A research assistant was hired in the Fall of 2000 to administer an entering and exiting questionnaire to the class (n=22) and to interview self-selected students several times throughout the 13 weeks of the course in order to ascertain what students felt they were learning from the virtual field trip. Student feedback from the initial and summative questionnaires and the interviews suggested that my

course goals were achieved and that the web-based experiences were important to achieving those goals. Generally, students liked that the virtual field trip provided exposure to a novel, constructivist-based approach to teaching and learning. The problem-based approach set within a "real" school context gave students a meaningful, authentic and relevant learning experience. The multiple perspectives were appreciated as they helped students to gain insights about teaching and children as well as allowing them to pick up teaching, resource and organizational ideas. In this way, students were offered an opportunity to link the theories they were hearing about in their university courses to the statements made by the children, teachers and experts in the field.

As well, students liked the hands-on learning that the virtual field trip offered. Requiring them to be actively involved on a regular basis with the computer as a component of the course experience resulted in a general decrease in technology anxiety and an increase in their confidence with the computers. Students were also better able to envision how to apply and integrate technology in their teaching and were motivated to develop technology-based projects for use in their future classrooms.

Based on the findings, I feel that I have been able to assist my students in developing new models of teaching and learning using computer technologies. I feel confident that I am addressing the concern expressed in the research literature regarding preservice teachers not learning enough in their courses about how to integrate technology into the various subject areas (Rose & Winterfeldt, 1998; Vagle, 1995).

Concluding Remarks

Interactive multimedia based on problem-based learning principles may be one of the combinations that will contribute to the next wave of improvements in the proportion of future teachers learning with technology. This article has presented one such possibility for helping preservice teachers to "rethink" traditional instruction by immersing them in a constructivist, problem based learning environment with the assistance of computer technologies.

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Social Studies and Technology: Teachers' Perceptions of Effective Integration

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Abstract: Billons of dollars are being poured into technology with the hope that innovative use of technology will improve our schools. With the growing expenditures on technology in education, a pertinent issue arises: How is technology being used to enhance the curriculum? Effective uses of technology vary among disciplines. Thus this study focused on secondary social studies instruction. This study sought to examine secondary social studies teachers' perceptions of effective integration of technology.

Introduction

Schools are moving at different paces at integrating technology. Technological resources within schools can be placed on a continuum, with the opposing points being the technology-rich and the technology-poor. Where schools fall on this continuum depends on how they value technology (Maushak, 1999). Concern about the social consequences of technology have driven some to suggest de-emphasizing technology in education, while others have argued that effective instruction, particularly in social studies education, must include a range of computer technology skills (Martorella, 1997). Even within the technology-rich schools, there are varying degrees of integration of technology into the curriculum. Varying beliefs about the effectiveness of technology has contributed to the inconsistency in implementing technology.

Effective uses of technology vary among disciplines. Successfully integrating technology in social studies classrooms is a vital issue facing social studies educators (White, 2001,1), especially with the inconsistencies that exist in technology use. In many social studies classrooms, technology is viewed as an extra resource and is not integrated as an essential component of the curriculum. As Berson (1996) has noted, social studies educators have been reluctant to integrate computers into their curriculum and instruction. Limited research exists on the effective integration of technology in social studies classrooms (Mason, Berson, Diem, Hicks, Lee, & Dralle, 2000). Thus the question arises: What is the effective integration of technology in social studies classrooms?

Literature establishes parameters for effective integration as instruction that motivates, provides variety, promotes meaningful learning, and facilitates interactive learning (White, 1997). Effective integration of technology allows for students to take a more active role in their learning and allows them to connect with worlds and cultures that historically would have been impossible. White (2001) argues that effective utilization of technology not only empowers students, but it is a means for transforming the curriculum to one that facilitates the development of students who can think for themselves and participate as responsible citizens in an ever changing world. The effective integration of technology "redefines what classrooms are, how kids learn, and what constitutes a learning community" (Sullivan, 1994, p. 5). Mason et al. (2000) recognize the lack of empirical research in technology integration in the social studies. They also call for continued research to expand technology use within the social studies curriculum.

The Study

The purpose of this study was to examine how secondary social studies teachers in North Carolina define effective technology integration. Using a survey design, descriptive data was collected to identify teachers' beliefs about technology integration in secondary social studies classes. A multistage sampling procedure was used to identify the sample. The target population of the study is all secondary social studies teachers in North Carolina. The questionnaire was designed to identify the importance of existing beliefs about technology. The guiding research question for the study is: How do secondary social studies teachers define effective integration of technology in social studies?

Findings

Effective integration of technology in social studies classrooms is defined by the development of respondents' responses in a pilot study. Patterns that emerged identify teachers' perceptions of effective integration of technology. First, the effective integration of technology extends learning beyond what could be done without technology. Technology increases teachers' resources and options as they plan to help students gather, organize, manipulate, and think about new information. Technology provides resources that are relevant, current, and engaging. A teacher remarked, "Activities using technology should be designed that cannot be done the 'old-fashioned' way."

Effective integration of technology in social studies enhances the curriculum. Effective integration of technology enhances learning by offering access to resources that are not accessible in a traditional classroom setting. Teachers have access to useful and innovative teaching materials and valuable primary sources through the Internet. A teacher commented, "Technology should enhance the existing curriculum, not be an add-on." The ideas established in the NCSS: Social Studies Curriculum Guidelines state that social studies teaching should draw from a broad range of content sources and use varied learning resources and activities (NCSS

Powerful Teaching, 1992). Many teachers identified the use of technology to supplement their instruction and instructional resources. A teacher stated, "The effective integration of technology utilizes a multitude of computer programs to supplement text and teacher instruction."

Next, the effective integration of technology promotes communication among students, teachers, and the global community. One teacher described his/her classroom's partnership with another classroom in Eastern Europe via email as a method for effective technology integration. Effective integration of technology offers students and teachers the opportunity to become interconnected with the local, national, and global communities. Email and discussion boards allow students and teachers to communicate with the students and teachers around the world. Many teachers reported the increased communication with their students due to the use of email.

The effective integration of technology changes the classroom environment. Instruction shifts from a teacher-directed approach to a more student-centered classroom. Technology as a tool does not change basic learning processes, but instead it transforms how these processes are developed. Teachers can more easily prepare lessons; consequently, their focus shifts to explaining information instead of conveying information. One teacher remarked, "I use technology every day to prepare for my classes. I believe it helps to have access to up-to-date information at the click of a button. I use Microsoft Word and Excel to create worksheets and charts for my students to complete, as well as the Internet to contact them about missing homework assignments. I also use PowerPoint presentations to make the information a little more exciting then simply having to take notes from the overhead, where there is little color or animation. Also, my students prefer to take notes from something that is legible (typing), rather than trying to decipher my handwriting." Another teacher responded, "To effective use technology, students should be actively engaged in data collection or manipulation, not just random surfing."

Lastly, the effective integration of technology promotes skills, knowledge, and participation of students as good citizens in a democratic society, which are the goals of the National Council on the Social Studies (NCSS). One teacher commented, "Technology provides a variety of instructional strategies to take advantage of different learning styles. The frequency of use allows students to develop technological skills and enhance inductive learning." Another teacher commented, "The effective integration of technology means that students will be able to use technology in all facets of instruction. For example, they can use the Internet to conduct research, Microsoft Word to type a research paper, use PowerPoint to create a presentation, include a spreadsheet or graph in the PowerPoint presentation."

Conclusions

Social studies is often perceived as a boring subject. The common methodology for teaching this "boring subject" is the transmission of facts through direct instruction. This is reflective of a curriculum that was designed decades ago. White (2001) suggests that many social studies classrooms reflect little meaningful instruction. White (1997) asserts that effective integration of technology can provide opportunities to make social studies education empowering and transformative. To promote technology use in secondary social studies, teachers need to conceptualize what it means to effectively integrate technology.

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Information Technology, Constructivism, and Social Studies Teacher Education

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Many social studies educators have argued that preparing students for the responsibility of the office of citizen, in terms of developing the knowledge, skills and dispositions necessary for informed deliberation, active decision making and civic participation, is in fact the perfect place to let students learn to critically explore their world through the use of such interactive technologies as the Internet.[i] A key assumption of this proposed use of technology is that having access to up-to-date knowledge resources, archives, and experts via information technology can improve teaching and learning within the social studies.

However, in spite of its promise and potential, the literature suggests that very little development, and implementation of technology has taken place within social studies preservice and inservice classrooms.[ii] The danger of such a situation continuing, Fontana warns, may well be that,

> others who know nothing of the discipline will shape these important networking tools without the needs of the social studies in mind. If social studies educators fail to be at the forefront of technology, they risk having parents and policy makers conclude that the social studies are not relevant in the information age.[iii]

However as Means and Olsen note, efforts to introduce technology into schools as a whole have struggled because they were founded upon the "wrong model of teaching with technology." The problem they contend was that "product developers believed in their content knowledge, pedagogical techniques, and in the power of technology to transmit knowledge to students" instead of providing the types of technologies that support "students and teachers in obtaining, organizing, manipulating and displaying information." [iv] With this in mind, the question that must be addressed by social studies educators in the information age is how can we prepare social studies teachers to best implement current and emerging technologies within our classrooms? The process of answering such an important question, we believe, must begin with the development of a clearly defined theoretical foundation designed to inform our understanding of why and how the incorporation of technologies can move us toward the National Council for Social Studies' (NCSS) vision of powerful social studies teaching and learning.[v] It is disconcerting that despite support for integrating technology; the application of technology within the realm of social studies is theoretically underdeveloped. Even the most recent research that has advocated the use of a constructivist theoretical perspective to undergird the use of technology in the social studies classroom has not fully developed a clear framework of principles that support the integration of technology into the social studies.[vi] The purpose of this paper is to provide such a practical constructivist framework of principles, along with specific examples of how the application of technology, and in particular the Internet, can be used as a developmental tool to facilitate inquiry, perspective taking, deliberation, and knowledge construction in the education of young citizens.

The paper will argue that if technology is to have a powerful impact on the teaching and learning of social studies then "the ways that we use technologies in schools should change, from their traditional roles of technology-as-teacher to technology-as-partner in the learning process."[vii] The key to achieving powerful teaching and learning in social studies, therefore, is not technology itself, but rather how technology is used as a tool to encourage the doing of social studies in the pursuit of citizenship. Such efforts must be grounded in theory; otherwise, the results will be little more than a collection of disparate individual efforts that do little to truly advance social studies programs toward the NCSS's vision of powerful teaching and learning.

The challenge in preparing social studies teachers to use technology must begin with identifying why and how technology can be used to facilitate the creation of meaningful and disciplined knowledge within each student, and not to serve as a substitute for knowledge creation or for traditional classroom "teacher talk." The theoretical foundation for the integration of technology into the social studies emphasizes that the proper role for technology in the social studies is that of "technology-as-partner." Grounding one's actions within and through such a theoretical framework, we contend, is a vital first, and much needed step in the process of developing and preparing social studies teachers who know why and

how to use technology to transform their classrooms into a model based on authentic student inquiry and experiences.

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[i] See themed issues of *Theory and Research in Social Education* 28(4) 2000; *Social Education,* " Bits, Bytes, Bugs: Social Studies Education in the Digital Age" volume 63, No. 3, April 1999 and "Teach Social Studies in the Information Age" volume 64, No.3 April 2000; Michael Berson, Barbara Cruz, James Duplass & J. Howard Johnson. *Social Studies and the Internet* (New Jersey: Merrill Prentice Hall, 2001); Joseph A. Braun and C. Frederick Risinger, eds, *Surfing Social Studies: The Internet Book* (Washington, DC: NCSS, 1999); John. Cogan, David. Grossman, & Mei-hui. Lei, "Citizenship: democratic imagination in a global context," Social Education 64 (1), (2000): 48-52; Richard Diem, "Editor's note," *Social Studies and the Young Learner. 2* No.1 (1999, September October): 2; Warren C. Hope, " It's time to transform social studies teaching," *The Social Studies* 87 No.4 (1996): 149-151; Carol Klenow, "Electronic social studies" *Instructor* 102, No. 3 (Oct 1992): 65-66; Peter Martorella, ed, *Interactive Technologies and the Social Studies.* (Albany, NY: State University of New York Press1997); Cameron White, (1999). "It's not just another new thing: technology as a transformative innovation for Social Studies teacher education." *Journal of Technology and Teacher Education*. 7(1) (1999): 3-12.

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Engaging in scholarly dialogue: CITE Journal and the social studies

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Abstract: This paper focuses on dynamics that are unique to electronic publishing. The content of this paper is drawn from the authors' experience editing the social studies section of Contemporary Issues in Technology and Teacher Education (CITE) Journal. In this paper, the authors' will discuss the unique characteristics of the electronic publishing milieu with special attention to how these characteristics are incorporated within the editorial philosophy of the social studies section of the CITE Journal.

Introduction

Contemporary Issues in Technology and Teacher Education (CITE) Journal is an electronic publication focusing on theory, current issues, and current practices relating to technology and education. The journal is divided into numerous sections including social studies. The social studies section of CITE Journal is endorsed by the National Council of Social Studies College and University Faculty Assembly. The journal includes sound, animated images, and simulation, as well as immediate dialog about articles concerning current theoretical issues. CITE Journal accepts submissions relating to current issues in social studies and technology education, conceptual or theoretical uses of technology in social studies as well as significant policy and practice issues. Readers of articles may also write critiques/commentaries and submit them forpublication. These publications are treated as articles and refereed in the same way as all other articles.

As a scholarly publication CITE Journal reflects 3 unique electronic publishing dynamics. These dynamics include the interplay of unique characteristics relating to the journal's electronic or multimodal nature, the iterative character of the scholarly debate that occurs in the journal, and the potential for a new type of critical reading of scholarly papers. This paper is focused on these distinct dynamics.

CITE Journal's electronic or multimodal nature

Electronic publication opens the door to a wide variety of presentation techniques. Authors writing in electronic or multimodal mediums are no longer tied to linear narrative. In disciplines such as history and literature non-linear narrative is prompting a reconsideration of issues relating to the intent and authority of the reader and the author. Digital non-linear presentation provides students with a means to explore alternative representations of their findings. Non-linear hypertext narratives can be used to connect arguments to evidence and they give readers a greater deal of autonomy (Rosenzweig, 1999). Some radical thinkers see hypertext as freeing mechanism that may displace traditional narrative (Landow, 1995). Others suggest that hypertext is oversold and not substantially different than other forms of non-linear text

(Davidson, 1997). What is beyond debate is the technical capacity of hypertext, which enables writers to construct connective meaning in ways that are not possible in traditional narrative (Dobrin, 1994). CITE Journal encourages non-linear narrative texts and facilitates the development of these texts.

Articles in electronic publications can incorporate a wide variety of media including still images, audio, and video. In addition, software specific simulations and demonstrations may be used to enhance the rhetorical value of a piece or to communicate a practical dimension that might otherwise be absent in a print journal. CITE Journal is providing social studies researchers opportunities to develop a wide range of alternative presentation formats.

An example of an alternative presentation can be found in a CITE Journal article on Geographic Information Systems by Alibrandi and Palmer-Moloney (2001). In this article, Alibrandi and Palmer-Moloney use links and images to engage the reader with a wide range of possible web-based experiences. Readers are encouraged to read (via links) the literature that informed the authors' findings. Readers are also able to experience a variety of GIS related web-based resources. As readers use these resources concurrent with reading the article, they can generate a type of authenticity that is very difficult in traditional print media.

Readers might also experience an author's actual research data or foundational work. Another article in CITE Journal by Sherman and Hicks (2001) invites readers to view virtual reality files from a course taught by the authors. The potential for engaging the work underlying an authors' published findings is a groundbreaking step in publishing. CITE Journal is dedicated to continuing to provide readers with access to the raw data used by researchers.

The common way to refer to the experiences resulting from reading multimodal online articles is to use the much overused term "interactive." The Journal of Interactive Media in Education defines interactive as referring "both to interaction *through* the media with other people (e.g. teacher-student, student-student, researcher-teacher), and to interaction *with* the materials embedded in the media (e.g. control of a simulation or educational game)" - (see the Journal of Interactive Media in Education at http://www-jime.open.ac.uk/). CITE Journal promotes interaction in both senses of the above definition. As pervious described, readers are encourage to experience various forms of media. In addition, readers are encouraged to interact with other scholars. The primary vehicle for this personal interaction is the commentary feature in the journal. This feature generates a form of scholarly debate that is almost impossible in traditional print media.

The iterative nature of the scholarly debate on CITE Journal

Scholarly discourse should be continuous, vibrant, and iterative. Often the nature of these debates is severally limited by the publishing environments in which debates takes place. Reponses and rejoinders to published journal articles are important and often quite vibrant, but the restrictive characteristics of print journals sometimes limit the reader's ability to access the full debate. Often responses and rejoinders are published in latter editions and the reader may not have all of these pieces available. Electronically published journals can offer the reader the opportunity to easily immerse themselves within ongoing academic conversations. In addition, the dialogue can be presented in a dynamic fashion as additional responses are published.

One of the most important features of CITE Journal is the commentary. Editors and readers are invited to write commentaries for published and soon to be published works. These commentaries are organized on the CITE Journal web site in a thread. As new commentaries are written the thread reflects the changes.

There are numerous issues in social studies that may be relevant for such scholarly discourse. The question of how technology fits in with the democratic mission of social studies is a prime example of how discourse in a web-based environment might be enlivened. The active interplay of ideas is essential for a democratic society and CITE Journal encourages this type of active engagement. The Web allows for a level of flexibility that is better suited for the multiple voices that must be heard in order for the dialogue to be democratic. In addition, the focus of control over the discourse can shift from the authors and editors to the reader.

Critical reading and CITE Journal

Critical theorist claim that objectivity, truth, and other fixed and permanent means for analyzing text (and philosophically life in general) are flawed. An exhausting variety of theories have been proposed as corrections for the "flaws" of objectivity. Although CITE Journal is not a publication that actively explores critical theory, it does serve as an outlet for the expression of certain critical theories. In a broad sense, CITE Journal is critical because it is in hypertext and it is multimodal and the articles in the journal are given meaning when they are read. This form of "reading" hints at the "writerly" potential of web-based publishing. The term "writerly" is attributed to Roland Barthes who conceptualized of "writerly" text as a form of text that is situated in the present and is real only when experienced. The multiple meanings that emerge from reading experiences are in a sense exaggerated in hypertext by the presence of choices about how to proceed through a text. Readers can follow links within and outside the CITE Journal web site. They can access simulation, video, and audio, which may accompany the text. They might also take the text out of its presentation context (using a save or cut and paste technique) and redesign the text to better suit their needs.

Beyond the technological characteristics that allow for critical reading, CITE Journal editors actively seek topics that might generate critical analysis. In addition, readers are invited to participate in dialogue spinning off an original publication. Since there are no restrictions on publication quantity, multiple voices can be heard without the stifling influence of publication costs.

Conclusion

CITE Journal is focused on the proposition that scholarly publication in a web-based environment can encourage a type of interaction that is impossible in traditional print format. By connecting readers to resources outside the actual publication and encouraging other scholars to engage in electronic scholarly dialogue, CITE Journal is operating in a new landscape. This new landscape can serve to free readers from the constraints of linear text and can provide new media outlets for authors seeking to express their findings in contexts that reflect their research. In addition, CITE Journal is promoting new type of critical reading that places the reader at an advantage. Readers can access the author's research to confirm or disconfirm findings and to follow-up or expand upon the author's findings. Most importantly, a dynamic scholarly dialogue that is not possible is traditional print can be facilitated on the Web. By publishing in CITE Journal social studies scholars can expand on the existing paradigms of publishing and research and open new doors for future understandings and interpretations.

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Use of digital historical resources in a large urban school system

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Abstract This paper will report on the results of comprehensive survey administered in a large urban/suburban school district in the southeastern United States. The findings presented in this paper will illuminate the extent to which teachers are using digital historical resources and the ways in which they are using them. This study involved a survey of 73 high school social studies teachers in a large southern urban/suburban school district. The survey instrument included four dimensions, a demographic section, a section surveying teachers' general belief about social studies and his or her use of non-web based primary historical sources, a section inquiring about teachers' comfort with technology, and a section on the specific uses of digital historical resources. The findings of this survey support the contention that digital history has the potential to alter the general study of history, but there are several obstacles to this change.

Introduction

Throughout human history technological innovations have interacted with academics. The emergence of modern science in the 16th century was in part a consequence of the development of print technology and the newfound ability to publish and disseminate scientific findings. The rapid expansion of science led to the invention of new technologies, which in turn have made possible academic work in a variety of academic areas. Today it is Internet technology that is most dramatically affecting academia. The academic study of history with its reliance on information is particularly susceptible to change. With the advent of the Web, historians and students now have access to materials in places and at times that were previously unimaginable.

As teachers and students begin to use historical resources, social studies and history instruction will change. This article is a report on the results of a comprehensive survey administered in a large urban/suburban school district in the southeastern United States. The findings presented in this article will illuminate the extent to which teachers are using digital historical resources and the ways in which they are using them. Before presenting these findings three ideas related to the phenomena of digital history must be explored, 1) What is digital history? 2) How does digital historical research differ from traditional historical research? and 3) What are the pedagogical implications of digital history?

What is digital history?

Digital history is the study of the past using a variety of electronically reproduced primary source texts, images, and artifacts as well as the constructed historical narratives, accounts, or presentations that result from digital historical inquiry. Digital historical resources are typically maintained on the World Wide Web. The availability of the materials on the Web is the most important distinguishing characteristic of digital historical resources. By using online historical sources teachers and students can avoid the complexities of access that are associated with visiting a physical archive.

Beyond the enabling fact that digital historical resources are "available," these materials also facilitate the construction of new typed of scholarship and narratives. In the digital genre of history, students have the same access as historians. Interpretations compete on the same ground. As the numbers of students making interpretations increases and as students' various interpretations begin to via for attention and respect, students will begin to adapt to a view of past that is tentative and process orientated. These changes have enormous implications for social studies teachers. Teachers will no longer be able to present history prima facia. Instead, using digital historical resources students will negotiate the stories of the past through their own inquiry and investigation.

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How do digital historical resources differ from primary source documents?

Despite the similarities, digital historical resources are different from non-digital materials in at least four ways; 1) digital historical sources are more accessible, 2) they are easier to manipulate, 3) they are searchable, and 4) the flexibility of the web allows for a dynamic organizational strategy. Digital historical resources are clearly more accessible than non-digital primary source documents and artifacts. The ease of publication on the Web has lowered economic barriers to creating historical archives. This economic reality has resulted in the production of numerous very high quality collections. Although a comprehensive list of digital historical collections is not yet available, one of the best lists can be found at http://www.historymatters.gmu.edu/. In addition to increased availability, the structural differences between digital historical and non-digital resources (easier to manipulate, searchable, and flexibly organized) represent a major improvement over "physical" resources. Teachers and students can search digital historical collections to find information using rational and teachable techniques. The Web allows for the organization of individual documents and collections in logical and easy to use formats. As is the case with narratives, students who are constructing digital collections can arranged collections in a non-linear fashion that might reflect some of the idiosyncratic characteristic of the documents.

The unique characteristics of the Web, particularly its hypertexuality, also encourage alternative narrative forms. The nonlinear shape of the Web can serve as a lever to encourage students to deal with the multiple sequences, voices, outcomes and implications of historical narrative (Ayers, 1999). As students write historical narratives in hypertext they will have the ability, through the construction of links, to exerc ise a greater sense of control over the narrative and particularly the structure of arguments within the narrative.

How has digital history affected college and k-12 history and social studies education?

The Web did not simply appear and change social studies overnight. In fact, to the contrary, the almost euphoric expectations that accompanied the introduction and development of Web were for the most part unmet. The pronouncements of a technology revolution that echoed through the decade of the 1990s and followed us into this new century were in hindsight shallow and rhetorical. In the discipline of history there is reason to believe that most teachers actual practice was relatively unaffected by the technological revolution of the 1990s. In a wide-ranging series of reports based on a national survey of over 4,000 teachers Becker (2000) found that fewer than 20% of social studies teachers use computer technology. In a study of 54 elementary pre-service social studies education students Sunal, Smith, Sunal, and Britt (1998) found a low likelihood that teachers could plan to use the Internet to facilitate an inquiry lesson.

The most active use of digital historical resources to date has been in colleges and universities. For examples of hypertext scholarship online see Hypertext Scholarship in American Studies http://chnm.gmu.edu/aq/. Examples of students' digital historical scholarship can be found at the Virginia Center for Digital History http://jefferson.village.virginia.edu/vshadow2/projects/projects.html. The use of digital historical resources in colleges may well be a consequence of the hands-on historical activity that is associated with college level history. The shear number of resources available online is certainly adequate for facilitating serious historical inquiry and research. Numerous college history professors are making use of the Virginia Center for Digital History's Valley of the Shadow to facilitate their students' primary document based historical research. Galgano (1999) reported on his use of the site in an undergraduate history methods course in which students analyzed newspaper articles, letters, and diaries and completed exercises on historical bias, document verification, and statistical analysis. Umbach at Cornell University has also used the collection to facilitate students' analysis of documents and to construct of online hypertext narratives. See Umbach's students' work at http://instruct1.cit.cornell.edu/courses/hist100.06/. Using digital historical resources also offers historical methodological advantages over traditional historical resources. Kelly (2000) found that college history students engaged in a higher level of recursiveness (returning to the same document) when they used digital historical resources as opposed to print resources. The author also found that students were better able to relate documents and make connections when using digital historical resources.

The literature on the use of digital historical resources in k-12 social studies and history instruction is very limited. It focuses primarily on descriptive reports of classroom practice using history-related resources on the World Wide Web. Most of these reviews were very positive and almost utopian in orientation. Most often the authors claimed that the Internet offered "promise" or "potential" unmatched in educational history. Despite the lack of depth evidenced in these descriptive reports, some researchers made efforts to substantiate the pedagogical worthiness of digital historical resources. Wilson and Marsh (1995) reported that the use of the computers and, specifically, the Internet could better engage students and "stimulate an interest in the written word as students search for documents in remote libraries." Rehmel (1998) described a teachers' experience

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with online historical inquiry that was plagued by poorly operating hardware and uninterested peers. Rehmel concluded that using technology does not excuse teachers from maintaining student interest and focus in inquiry. Warren found that student generated web-based primary source collections are an invaluable means of injecting authenticity into high school history classrooms.

Method

A four part 84 question survey was sent to 110 high school social studies teachers in a single school system in a southeastern state. 77 surveys were returned. Of these 73 completed surveys were included in the analysis (representing a 66% of the survey population). The survey instrument included several questions concerning the participants' background. Another set of questions related to participants' teaching style, including questions about participants' philosophy of teaching history and their use of primary sources. Additional questions focused on participants' comfort level using various types of technology such as email, word processors, spreadsheets, and multimedia. A final set of questions concerned participants' use of digital historical resources including the types of resources used, the frequency of use, and pedagogical reasons for use. In reporting the results, descriptive statistical analysis was used.

Results

Characteristics of the school system

At the time of this study, the school system had 10 high schools and over 65,000 K-12 students. It was the fourth largest system in the state. The social studies curriculum in the system included high courses in U.S. history, world history, economics, and civics/government. In addition, students could take elective courses in area historical studies (e.g. Russian history), psychology, sociology, or current issues. The 2000 United States Census showed that the county's population was roughly half white and half black, with the northern area of the county distinctly white and the central and southern areas of the county distinctly black. A substantial number of the blacks living in the county attended a different school system in a city within the county. Forty-eight percent of the county's K-12 students were white, 39% were black, 5% were Hispanic, and 5% were Asian. The school system, like the county, had very distinct racial lines. Four high schools in the southern half of the county had 77% of all the blacks students in the county and 89% of all the students in these four schools were black. Respondents indicated that just over half of the schools (53%) were predominantly white, while 28% were predominantly black and 19% multiracial. Twenty eight percent of the respondents indicated that they worked in urban schools. Half of the participants indicated that his or her school was varied in terms of socio-economic status.

Characteristics of the teachers

Answers on section 1 of the survey provided a profile of the teachers who completed the survey. Teachers from grades 9-12 teaching in all mainstream social studies content areas were represented in the survey. Most of the teachers surveyed taught more than one grade level and all 4 grades were well represented in sample (28% taught 9^{th}, 38% taught 10^{th}, 46% taught 11^{th}, 35% taught 12^{th}). There was a wide range of courses taught. Sixty-two of the 73 participants (86%) taught history (either United States or world) and 12 of those teachers taught both courses. The other commonly taught courses were civics/government (25) economics (18), and geography (10). Participants taught an average of 13 years. Forty-four participants (60%) had a master's degree and 7 (10%) had doctorates. Half the teachers were male and half female and there was a normally distribution of teachers in terms of age age.

Reasons for teaching history

The first question in part 2 of the survey asked teachers to indicate the importance of several statements concerning why his or her students learn history. Participants believed that learning about the connections between the past and the present was the most important reason for learning history, acquiring knowledge of basic facts was second most important and developing skills of historical inquiry was third. Making historical generalizations and understanding the place of America in world history were considered to be somewhat less important. Developing a sense of time was thought by the participants to be the least important reason for teaching history.

The uses of historical sources in social studies

Participants were asked the extent to which they used primary sources in their class. All 73 respondents (100%) indicated that they used primary sources. When asked about the frequency of this use 30

respondents (42%) said they used primary sources more than once a week, 19 respondents (26%) said they used primary sources once a week, and 23 respondents (32%) said they used primary sources a few times a year. Participants were also asked if they used primary historical materials that were from specific resources. Almost all the teachers indicated that they used historical primary sources from the textbook (95%). A very large majority of teachers used primary historical sources from the Internet (86%). Smaller percentages of teacher used primary sources materials from resource pacts (46%) and book based collections (65%). Teachers used primary source texts and images with equal frequency, but were less likely to use historical video and audio recordings.

In addition to being asked about the frequency of primary source material usages, participants were also asked about the reasons for using these materials. Participants' responses indicated that providing students with a context for developing their historical thinking skills, providing students with a sense of the experiences and conditions of the period being studied, and providing students an understanding of the essential facts, concepts, and generalizations that underlie historical knowledge were most important. Providing students with an opportunity to question historical truths and engage in historical interpretation or revisionism were considered to be less important. Test preparation was by far the least important reason for using primary source materials.

Participants were also asked how important certain historical activities were for using primary source materials with their students. Using primary sources to learn about individuals and events was listed as most important. Detecting bias, distortion, and propaganda was second most important. Skills that are normally associated with the work of historians such as determining the context and credibility or authenticity of the sources were less important for teachers.

Comfort with technology

Participants were asked about their comfort with using certain technologies. The responses suggested that teachers were not comfortable using all forms of technology. Respondents were very comfortable using word processors, email, and the web. They were much less comfortable teaching students how to use these technologies.

The uses of digital historical resources in social studies

When asked, "have you ever accessed historical primary sources from the Internet for use in your classroom," 65 out of 73 (89%) of the respondents said yes. The use of digital historical resources was limited by participants' inability to find time to conduct searches on the Web and participants lack of access. Teachers most often made copies of the materials from the Web and brought them into class. Far fewer actually used computers in the classroom. When asked what needed to change in their school or classroom in order to increase the likelihood that they would use primary sources from the Web, teachers suggested the most important change would be to increase the number of computers. The second most important change would be to have more time in the curriculum to study historical documents. Following these two were fewer standards, training on using primary sources from the Internet, and training on historical methods for using primary sources.

On the last section of the survey participants were asked to agree or disagree to a series of questions about using web-based or digital historical resources. Participants strongly agreed that the Web provides access to previously unattainable resources. Participants also agreed that the Web was a valuable tool for comparing sources from the same period. To a lesser degree they believed that Web access has changed the way they teach. Participants disagreed with the statement that using primary sources on the Web makes no difference in how they teach. They agree with the idea that online primary historical sources give students a richer sense of historical experiences and conditions. Finally, participants tended to agree with the notion that teaching with web-based historical materials was different that teaching with traditional historical materials.

Conclusion

The findings in this study support the anecdotal evidence that suggests digital historical resources are being used in high school social studies classes. Eighty nine percent of respondents in this survey indicated that they used digital historical resources. Although there were limits on this use (time and computer access were the most important limits), the teachers in this survey seemed to recognize that digital historical resources were unique and valuable. The availability of previously unavailable resources was considered to be the most important attribute of the Web. This finding suggested that development of digital historical resource should be a high priority. Participants thought that using digital historical sources was (or would) change the way they

taught. This finding suggested that digital historical resources posses some unique characteristics. Additional research should be conduct to uncover the differences between digital and non-digital resources.

Participants' general preference for having students make connections between the past and the present was an indication that teachers were interested developing real world functionality in the classrooms. Participants were willing to use web-based historical materials to help their students make these connections. Given the participants' responses concerning the importance of using primary source materials (both digital and non-digital), one could expect these materials to occupy a central position in the classroom. To some degree this was true, but a majority of the teachers were still reluctant to use primary historical sources more than one time a week. This was most likely a product of participants' belief that using primary historical resources does not help in test preparation. In a pedagogical atmosphere that rewards students' who posses "test-ready" factual understanding, teachers' unwillingness to regularly use primary source materials to conduct authentic historical inquiry is not surprising. Until the current practice of testing low-level historical knowledge is abandoned primary source materials will not be used frequently enough to meet the goal of helping students make connections between the past and present.

Participants were specifically asked about their use of digital historical sources. The literature suggested that there was a distinction in usage between digital and non-digital resources. Participants confirmed this finding when they indicated that their teaching style changed when using digital historical resources. They also recognized that certain conditions (including more time and resources) must change before effective use of digital materials can be achieved. This finding suggested that teachers must be provided more time to prepare their pedagogical knowledge of digital historical resources and that more computers should be placed at teachers and students disposal.

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Issues in Alaska Native Education

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Abstract: This paper explores the dynamic changes that occurred in teaching and learning when ED 478: Issues in Alaska Native Education, a traditional content course, was redesigned to become a technology-rich environment with support from a PT3 grant. The impact of technology was addressed from the point of view of the instructors and the students. Findings indicated that technology positively impacts the quality of student writing and creates an atmosphere where higher level discussion can occur in class. Many challenges still exist. Recommendations for the future included working with instructors to provide additional knowledge; allotting adequate lead time to review and revise course; collaborating with others in PTEP program on course sequence, scheduling, and continuity.

Introduction

The University of Alaska Anchorage School of Education along with partner school districts and businesses have participated in a Partnership for Teacher Enhancement grant during the last three years, working to redesign the teacher education program. A one-year, post graduate, intensive, internship model, Post Baccalaureate Teacher Education Program (PTEP) was developed. Our PT3 grant actively supported the integration of technology throughout the PTEP, including the development of an Essential Technology Skills Assessment (ETSA) and the redesign of ED 478 to be a technology rich course.

The PTEP was designed as a technology integrated program with no stand-alone technology class. Prior to the first cohort, the UAA PT3 grant supported the development of an Essential Technology Skills Assessment (ETSA) to assess student technology knowledge and skills and to ensure students had basic skills needed to be successful in technology rich classes, The ETSA was based on the ISTE National Educational Technology Standards (NETS) for Teachers.

Completion of courses in Alaska Studies and multicultural education/cross cultural communication are required for initial certification in Alaska. ED 478: Issues in Alaska Native Education meets the requirement for Alaska Studies. The course was delivered to the first cohort in a traditional fashion and sandwiched into an already full course of studies. Technology infusion into the program was not totally successful during the first year. Changes were made to the program structure, course sequence, and to how technology was infused.

ED 478: Issues in Alaska Native Education was moved to the summer session to focus on cultural issues from the beginning of the program and was to be redesigned to become a technology rich class. It became the initial course for the year-long cohort group. The course provided historical context for issues teachers in Alaska will face, as well as, a model for use of powerful and relevant technological tools. It was team taught by Paul Ongtooguk, a content specialist, and Ann McCoy, a technology specialist.

The instructors' backgrounds complimented the redesign of this course. Paul Ongtooguk is a senior research associate at the Institute of Social and Economic Research at the University of Alaska Anchorage. He is a project director for the Native Studies Curriculum Development. He taught high school

history and social studies in rural Alaska and currently teaches ED 478. Ann McCoy is an assistant professor in the Elementary Education Program and director of the Alaska PT3 grant. She came to Alaska to teach elementary school in rural Alaska. She has developed and taught education technology courses foundation, and methods courses at the university level. Pablo Cantu, technology coordinator for the Yupiit School District, teaches in Chevak, Alaska and provided technology assistance during the course.

Ongtooguk and McCoy met several times to prepare for changes to the class. The meetings were not structured nor were the instructors compensated for course redesign. They discussed alternatives and changes to course assignments to integrate technology. The ETSA provided the basis for the technology skills. The instructors were not aware of the impact that would occur when the two courses were merged.

Students (n=28) in the second cohort began the program in June, 2001 in ED 478: Issues in Alaska Native Education., The redesigned, technology rich course was team taught by a content specialist and a technology specialist with assistance from a rural educator. ED 478 required students to use a website to access readings about traditional Alaska Native education and other topics that affect Alaska Natives. Students read and responded to the readings using Blackboard, an online course management software. Students developed collaborative projects that utilized a variety of technology skills. Content structure included at least nine readings and responses, video, web research, guest speakers and class discussion.

Technological skills emphasized in ED 478 included: pre-assessment of technology skills, Internet tools; search strategies, site evaluation, information literacy; simple web page and bookmarks; basic word processing; simple spread sheets and graphs; using databases; graphics, movie basics; and computer operations and troubleshooting. Additional skills were added to the second summer session class.

Students had limited access to technology during the first two weeks of the class. Access to the computer lab was limited because it was being used by another class in the afternoon. Access to technology became more available at the beginning of the third week of class. As part of the Alaska PT3 grant, iBook computers were distributed to all students for their use during the year. Technology support was provided in the School of Education computer lab by lab aides, the rural educator, and the technology instructor.

It was a challenge to integrate two very different classes in an unfriendly scheduling format. Class met four days a week for three weeks (12 sessions) in June from 9:00 AM to 12:30 PM. During the first week course content was featured and technology was limited to introduction to Blackboard, email, and Internet strategies. During the second week, technological skills were emphasized and content was given more limited time. Video was used to illustrate traditional skills and also introduced as a technology. The final week was content heavy with most technology support provided after class hours. When it became evident that students would be unable to complete the collaborative web site project, they were given an additional week to work on it.

Findings

In typical classes, the instructor and students spend class time checking to see what was learned from reading and discovering other perspectives. In-class time was a precious commodity in this compressed class. Blackboard allowed instructors and students to make much better use of class time. This was Ongtooguk's initial experience using Blackboard to support instruction. Students learned about each other when they posted what they had learned from their reading on Blackboard and read postings by other students. Class time was spent on challenging each others perspectives and learning from those different perspectives. This took the discussion to a higher level. The instructor could ask probing questions like: "Is that important?" "How do you know?" The cooperation and collaboration that occurred in this class was a good model for prospective teachers. Our goal was to encourage them to not be solo teachers. Cooperation and collaboration is rarely modeled by instructors in the university but we did. The following posting from the Blackboard Discussion Board illustrates student communication.

Think Different Thread Posting to Blackboard by T: "The study of history sure does come from a lot of different angles. The old constructs like social Darwinism get blown out of the water for their racism and moral content and I wonder if there are other constructs to replace them with, ones that facilitate our understanding but without so much moral and cultural overlay. I am constantly being reminded to "think different" and that's a good place to start. I want that to underlie how I go about my teaching career. I think a lot of what has been discussed in class is relevant well beyond the confines of AK Natives issues. It makes my desire to teach more keen and the responsibilities that come with it seem greater. Two things that I put together was the progression of ANCSA and the People of Kauwerak. After a Disaster, it was

Ekeuknick and his Power of Imagination that leads his people to adapt and survive. He "took pride in all that he was doing because he saw each man was necessary for the living of the whole" In the same way, the AFN used the power of their collective imagination after a heap of disasters to adapt and survive in the modern world. ANCSA is their legacy."

Response to T from K: "It didn't occur to me to see the parallels with Kauwerak. You are absolutely right. As we've seen throughout this class once again the culture of Native Alaskans teaches respect for the ways of the past while adapting to the changing world around them."

All readings were posted online on the Alaskool web site (Ongtooguk, 2001). The level of class was much higher than if the readings had not been readily available. However, the development time for a comprehensive web site was enormous and included addressing issues of: securing copyright permission, time to post readings to web site, and other development matters. Many expenses associated with the development of a web site were funded for the Alaskool web site with a prior grant. This gave us a no-cost head start developing the course because the resources were already available.

The use of technology helped make the quality of student writing much stronger. Writing was not done only for instructor but as part of a shared experience. In many cases, written responses to reading more thoughtful than those from students in previous classes who responded only to the. Ongtooguk found when a student's response surprised him, he could easily refer to earlier responses to gain perspective.

Students spent a lot of time in their responses on native/non-native issues in education. Non-native issues were not the same as native issues. These issues can be tricky to deal with and potentially explosive in the classroom. Students saw mo del of respect for different opinions and participated in working together in a constructive way. The modeling of discussion of important but difficult issues in classroom provides good lessons for potential teachers. The usual model is to teach to the boring by having students confined to safe topics. Our model allowed students to engage in tough issues in safe boundaries. Student reflections indirectly showed positive response to being challenged. The following threaded discussion shows how students dealt with sensitive issues.

Issues Thread Posting to Blackboard by S. "One of the things that shocked me most was realizing that the purpose of school was to make natives less native, Assimilation, and this is still how school works for the most part. Oh my goodness, what a horrible revelation. The entire purpose is cultural genocide. It still exists, we still teach it!!! It made me clearly see why to many school seems worthless. Why one would not want to attend. Now there is a goal, to attempt to change this. To no longer teach things we are not aware of. Along with this I really find one of the most important things I am learning is that content without context means nothing. That motivation is everything. To this same thread was the last few moments of class today, the classroom should be a good, safe place to disagree. How true, classrooms are where we should teach people how to disagree in a good way. It is not important to always win someone over, but to clarify your own position. Without knowing all sides of an issue how can we make anything but uninformed choices? I have a lot to think about."

"Today, helped me understand the ANCSA paper, where and how things happened. Federal Indian Law and working within the established system is brilliant. The Native Land Claim is following the law! Why is this not out there in public knowledge? I understand the emotion behind the issue and the passion of all involved, but this must get out there, to all!"

Response to S from R: "Consider this though: To an educated Bostonian being Native meant that you were part of a culture which in the long course of human history had not managed to learn to write, do mathematics, discover the true nature of God, plant gardens and farms, build tall buildings, organize orchestras, build ships, travel around the world, invent the wheel, the plow, sails, smelting, glass, or paper. Native were superstitious and pagan, they lived in homes with dirt floors, they often starved to death. Wouldn't any caring Bostonian want to make a Native less Native, for his own good? And once that attitude was formed, when would it logically change? At what point would you expect our hypothetical Bostonian say, "They are far enough along, we should let them run their own lives?"

Response to S from C: "I, too, have a problem with assimilation. How can we have this huge melting pot without assimilating? And how can we maintain our wonderful diversity if we do? The more diverse we are, the more ideas, approaches, ways of thinking, and variability we have to adapt to changing environments. We need to keep all that we can. But today we are losing this diversity at an increasing rate. An article in the Daily News today stated that we are losing one language every 2 weeks! It is just too easy to accept the default (English) and not worry about our native tongues or cultures and just assimilate. I have a renewed interest now in relearning my first language!"

The class provided a demonstration of the promise of technology. Students learned of the usefulness of tools in content classes. Blackboard was used as an organizing tool. Students were able to log on to Blackboard and click a link to the Alaskool web site or the ETSA web site; links to additional web resources; an outline of class activities and readings with links. A powerful part of technology (Blackboard and email) was the ability to capture and record class interactions including tracking changes of ideas and development of issues. The course was much more documented than a traditional course.

The use of technology can be labor intensive. Ongtooguk went into class thinking he would respond to each student. The time needed to monitor and respond to discussion was very consuming. He never had time to walk away during the entire time, as opposed to a traditional class where once the in-class time is over, you are finished until the next class. There were 580 postings to the Blackboard Discussion area to 12 forums. Eight forums were used to post responses (n=459) to class readings. The remaining four forums were used for more general purposes. One was used to introduce students to Blackboard and to other members of the class. Others were available for general questions and for students to post resources they wanted to share. The final forum allowed students to post anonymously to provide suggestions for changes to the class. Table 1 illustrates the response patterns to the readings.

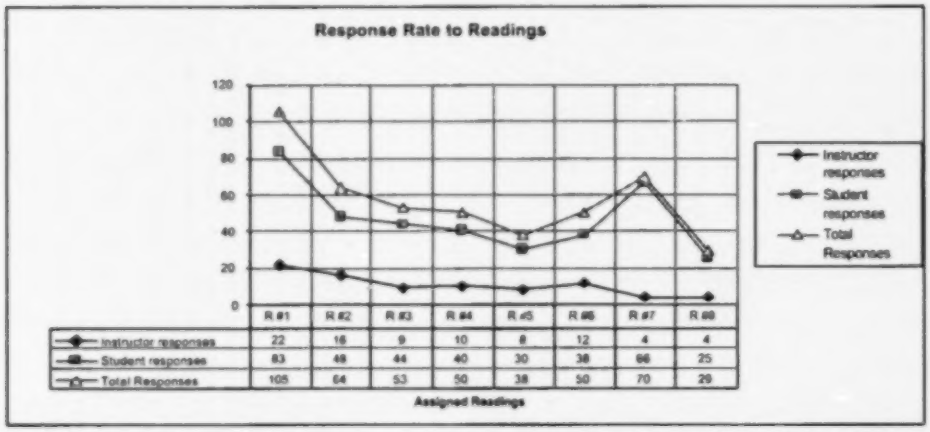

Table 1: Maps the number of responses to readings posted on Blackboard by students and the responses to students from instructor for each assigned reading.

Blackboard allowed the instructor to spend more time than the three weeks indicated in the class schedule by responding to students either on Blackboard or with email. Students posted their responses to readings prior to the next class session. Many students posted at 1:00-2:00 AM or 6:00 AM prior to start of class at 9:00 AM. Ongtooguk found he had to read the last set of responses at 7:00 AM or as time went on 6:30 AM. Instructors could be overwhelmed by the amount of discourse on the discussion board.

The college wasn't ready for technology. The logistical problems for use of technology were enormous. Many students did not have access to technology and when they finally did, many were not familiar with the laptops. The challenges of technology are illustrated in the following posting.

Overwhelmed? Thread Posting to Blackboard by E: "I can relate. I could barely understand what the assignment was today, let alone imagine how my contribution to our group site will have quality and content. Being unable to do homework outside of computer lab hours is also a major handicap for me and a handful of other students. I don't understand some of this tech language and the quick explanations in more tech language aren't always helpful. At one point today I was so far off of where the group was I just kind of glazed over and didn't even try to ask for help. Most Alaska native kids have probably spent a significant portion of their education feeling like I did today, only far more so. This may be just as important a lesson for me as how to make a web site."

Response to E from J: "Hear Hear. I'm with ya."

Response to E from instructor: "The sense of being lost - significant point of shared experience with many students. I am glad you brought this up as something important to recall as a teacher."

Conclusions and Recommendations

Students were given the opportunity to provide suggestions and recommendations for changes to the class. They offered many of the same ideas that the instructors had identified.

Review Thread (anonymous) Posting to Blackboard by A1: "I wanted to take a moment to say a few words about this class. I enjoyed it tremendously, It was thought provoking and mind blowing to some core issues I struggle with. I loved that Blackboard gave us such a wonderful opportunity to see what everyone was thinking about the articles and issues. I think it is a powerful tool to use in any class."

"My biggest concern and problem throughout the course has been the computer issue. I was one of the few who did not own a computer. I feel I was at a huge disadvantage, I repeat huge disadvantage, as all the readings and all the responses were via computer. I loved the computer part, but for me not having one meant reading and responding to articles and to other students was very difficult. To those who have computers, this may not seem a huge deal, but imagine taking away your car and then asking you to commute [30 miles] everyday, it would be more than inconvenient. I was told I would be given a computer for the year, so didn't purchase one, next time computers should be handed out in the beginning."

"That said, again I love the technology aspect of the class. All the amazing tools we are learning to use are going to enhance our teaching so much. I am thrilled to be learning it! And can't wait to set up my own classroom web page!"

"Finally, please make the class longer next year. There were many issues and topics I wanted to turn into discussions but with the shortness of time I always hesitated to bring them up. I have learned a lot and learned there is still so much to learn..."

Response to A1 from A2: "I think that the tech portion of this class should start the week before our content classes start, meeting at least three times, for maybe an hour an one half per class. ... We should be up to speed before we ever get into class. We have enough to do once we start. I understand that the previous class may still need their computers, but we could certainly use the lab to get started. Then the tech class should be a separate class that runs before or after Paul's class for an hour. ..."

"Technology had a positive impact on teaching and learning. It was evident the university needed to address access to technology issues. Because this is the beginning course of a year long cohort program, we would like to work collaboratively with others in the PTEP program to: continue the dialogue with students later in the year; make recommendations for the next cohort; and look at where the other parts of technology fit into the program. Students and instructors all felt that three weeks did not provide adequate time to adequately address the content and technology. A recommendation emerged that students learn some technology skills early before beginning the content. Perhaps some of the technology skills could be moved to the foundations and methods classes."

Before we teach the class again, we need more lead time to reconstruct the class. Instructors should be compensated to redesign the course. We learned that adding technology creates many unexpected changes that must be considered. Having the knowledge gained from the first session will help to develop a reading list ahead of time and review and possibly revise the ETSA model. Developing rules for engagement on the discussion board, including how and when instructors respond, should be a priority. At the conclusion of the class, provide time in class to summarize what we were trying to model.

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Acknowledgements

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The Design and Development of an Interactive Web Site for Teaching and Learning About American History

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Abstract: This paper describes the design and development of an interactive, educational web site for teaching and learning about American history. History teaching at both the high school and college levels persists in using traditional teaching methods, usually using teacher-directed approaches. Our goal is to develop new forms of history education that draw upon online resources and transform history teaching into a more student-centered, interactive experience.

Over the past eighteen months, the University of Houston College of Education and Department of History in collaboration with the Gilder Lehrman Institute of American History in New York and the Chicago Historical Society, has been developing an extensive array of historical resources for social studies and history teachers and students at the primary and secondary levels. Featured in the February 15, 2001 Wall Street Journal, the site is located at http://www.gliah.org. It contains over 1,500 active pages, including a comprehensive online U.S. history textbook; a searchable database containing the transcripts of over 600 primary source documents; glossaries, timelines, bibliographies, annotated hyperlinks, and essays on such topics as the treatment of American history in film and the history of aspects of private life.

The faculty participants--a historian who regularly teaches the large U.S. history survey class, a specialist in instructional technology; and a specialist in teacher education and social studies curriculum development--bring complementary talents to this project. These three faculty members work with graduate students and K-12 teachers to ensure that the materials designed will be pedagogically sound, meet state and national standards, and are motivating and interesting to students.

To help teachers meet state and national standards concerning content, pedagogy, and technology integration, the site contains classroom activities and handouts; lesson plans; and electronic lectures. It also serves as a portal to carefully evaluated historical resources on the World Wide Web including historical games, images, maps, music, newspaper articles, and speeches.

Our Website seeks to take advantage of the Web's communication, interactive, and search capabilities. An "ask the historian" feature, for example, allows students and teachers to pose questions to professional historians. Flash movies illustrate important themes in American history.

Instructional Design Model Used

The Reflective, Recursive, Design and Development model or the R2D2 model (Willis, 1995) contributed significantly to the process of design and development of this Web site. The R2D2 model is a non-linear instructional design model that promotes recursive, developmental planning, reflection, and collaboration among experts and participants. The R2D2 model is based on a facilitation model in which objectives emerge as the project is developed and are not "set in stone" during the design phase. A rather vague goal is accepted as the project begins, and the goals are negotiated and become clearer and more detailed as the actual development of the project occurs. There is also an increased emphasis on learning in meaningful, constructivist contexts.

A key component of the R2D2 model is that different parts of the development can occur simultaneously and can inform and change the design of another part. In addition, a collaborative, cross-functional team, rather than individuals working in isolation, drives the development of the project. Different project members often have interchangeable roles as opposed to the more traditional roles of instructional designer, programmer, and graphic artist, and contribute to emerging decisions, solutions and alternatives. These roles and activities often emerge as the project progresses and not from detailed flow charts and storyboards although there is a structure that guides the process. This structure gives this model its name – reflection and recursion.

Reflection provides opportunities for the development team and stakeholders to think about and reflect on both the decisions that that been made and also future decisions. The idea of reflective practice stresses the need to think about and revise ideas, plans, concepts and procedures based on "observation and analysis of what is happening in the practice environment" (Schon, 1991). As the project takes shape, feedback and other types of formative evaluation contribute significantly to the development process. This reflection by both the team members and other stakeholders is also a recursive process and occurs throughout the process. This model is an example of a participatory process since it provides the opportunity for all team members, stakeholders and prospective users to have a significant role in decision-making process.

This constructivist approach offers a significant improvement over more linear, sequential instructional design processes where individual team members may create various phases independently from one another. In addition, goals that are flexible and dynamic encourage opportunities for more interaction, creativity, and motivation among team members.

Many types of formative evaluation inform the recursive process throughout the project. Some assessments may be based on responses by content and design experts, while other feedback may be based on actual use by the target audience.

Initial Goals of the Project

In developing our site, we were guided by several goals:

Goal 1: To give students more meaningful, active learning opportunities through project-based activities using primary sources.

The Website gives students the opportunity to work with archival resources from the Gilder Lehrman Collection, on deposit in the Pierpont Morgan Library in New York, as well as selected materials from the Chicago Historical Society, items which were previously accessible only to scholars. It also contains extensive activities designed to promote active learning, including exploration guides that introduce students to working on particular historical topics; quizzes to test student knowledge; resources that link the past with current events and assignments involving maps, original documents, and statistical information.

Goal 2. To give University of Houston students the opportunity to participate in designing and developing online exhibitions and instructional materials for primary and secondary students and teachers.

Creating the site has been a collaborative process in which faculty members and students have had the opportunity to work closely together, combining their skills, knowledge, and energy. This process has been mutually beneficial. Students who had sophisticated computer skills have learned a great deal about history and research methods. Faculty members, in turn, have learned a great deal about the kinds of active learning strategies that work most effectively with today's students.

Goal 3. To carefully assess how online history resoources can be most effectivel incorporated into K-12 classrooms.

Many teachers do not know how to effectively incorporate Internet resources and primary source documents into their teaching. In social studies, technology is often used as an add-on, available when the "real work" is finished, or as a reward for good behavior. This projects has sought to develop a database of activities that will allow instructors at the introductory college and secondary levels to incorporate these resources in their courses; to train prospective teachers to use technology effectively in their history classes; and to test these activities in an actual U.S. history survey class classroom.

Focal Points of the Instructional Design Process

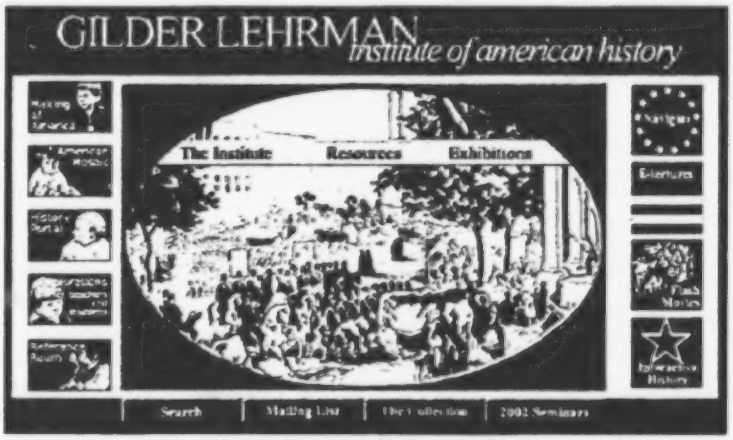
The principles of the R2D2 instructional design model, reflection, recursion, and participation, take place over the entire design and development process and provide three focal points: Definition, Design and Development, and Dissemination.

For this project, the Definition focal point provided a basic understanding of the users of the web site, in this case teachers and their students in grades 5 through college level and anyone interested in American history. The goals of the site were discussed collaboratively and were vaguely defined. These goals, as described above, became clearer and more detailed as the development progressed.

The Design and Development focal points are ongoing and involve all team members and an increasing sample of potential users. The design began with a vague plan sketched out and prototypes of the Web pages were created. Menus and navigation elements were developed as participants used the materials and more content was created. Feedback was solicited from both end users and content experts as the Development focal point continued. The process is very flexible and is driven by feedback and usability testing.

The Dissemination focal point is ongoing as well. The Web site came online in May, 2001, and content continues to be added. At the beginning of 2002, there was an average of 2,500 users a day on the Web site.

Unique Features of the Gilder Lehrman Institute of American History Web Site



http://www.gliah.uh.edu

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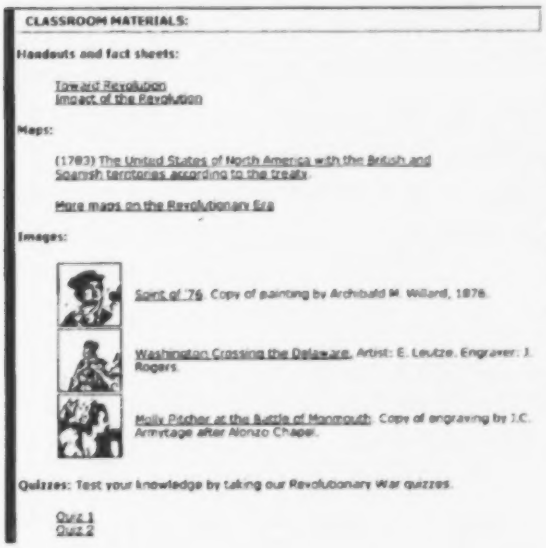
Dynamic Database

Our site, which complies with the latest standards for accessibility under the Americans with Disabilities Act, has a dynamic, database-driven design. Documents, texts, hyperlinks, and images have been placed in a searchable, relational database, and Web pages are generated dynamically using Cold Fusion. This approach eliminates the redundancy that plagues many web sites; allows the designers to change a single record and affect the entire web site; and gives all pages the same look and feel. More importantly, it allows users to request the information that they want, rathher than simply presenting the material in a rigid, predigested format. The website's Verity search engine allows users to conduct a keyword search of all text.


CLASSROOM MATERIALS:

Handouts and fact sheets:

Toward Revolution
Impact of the Revolution

Maps:

(1783) The United States of North America with the British and Spanish territories according to the treaty.

More maps on the Revolutionary Era

Images:

Spirit of '76. Copy of painting by Archibald M. Willard, 1876.

Washington Crossing the Delaware. Artist: E. Leutze. Engraver: J. Rogers.

Molly Pitcher at the Battle of Monmouth. Copy of engraving by J.C. Armytage after Alonzo Chapel.

Quizzes: Test your knowledge by taking our Revolutionary War quizzes.

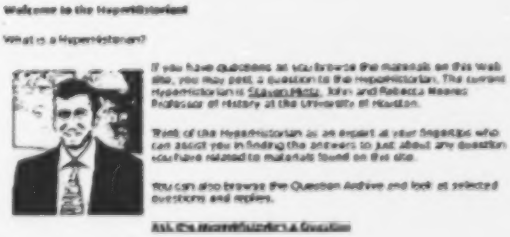
Quiz 1
Quiz 2

Content Materials

The Web site contains an entire American history textbook and over 300 annotated primary source materials. The site also serves as a portal for access to the history profession's major institutions such as historical archives, journals, societies, and institutes. A comprehensive guide to historical museums on the World Wide Web as well as living history museums and presidential libraries is also provided. Other resources include annotated links to audio resources such as speeches and book discussions by historians. Links to visual resources such as maps and historical images are included as well.

Interactive Materials

Materials have been designed to increase user interactivity with both primary source materials and with content experts. The site's Ask the HyperHistorian feature has been well received and provides users an opportunity to ask an historian a question about an event, a person, or an issue in American history.


Welcome to the HyperHistorian!

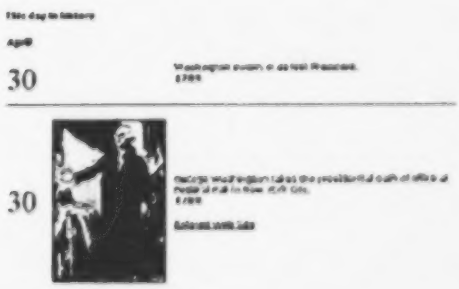
What is a HyperHistorian?

If you have questions as you browse the materials on this Web site, you may post a question to the HyperHistorian. The current HyperHistorian is Steven Mintz, John and Rebecca Moores Professor of History at the University of Houston.

Part of the HyperHistorian is an expert at your fingertips who can assist you in finding the answers to just about any question you have related to materials found on this site.

You can also browse the Question Archive and look at selected questions and replies.

Ask the HyperHistorian a Question


This day in history

April

30

30

Unlike the "This Day in History" features that one finds in daily newspapers, our Day by Day in History provides images of the past and links to valuable online resources. In addition, users can choose to display only certain categories of events such as abolition and the American revolution.

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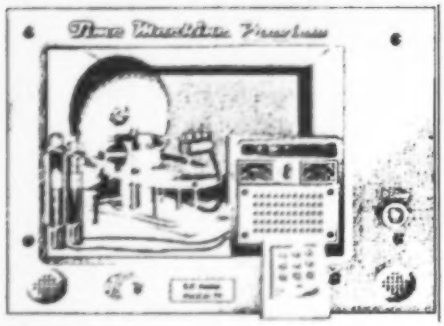
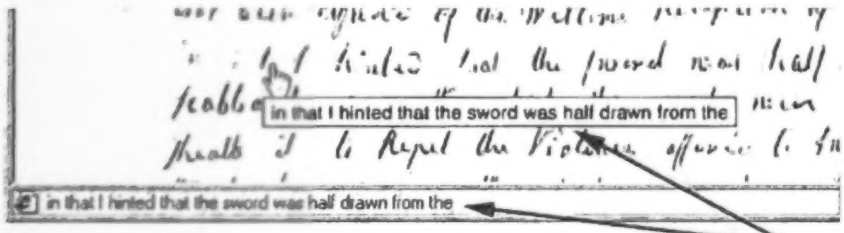
Flash Movies



A Time Machine created in Flash tests users knowledge of historical events and dates.

Our Flash movies provide an audio and visual overview of key themes in American history.

Primary Source Materials



Move your mouse slowly over the text of the letter. The translation will appear in these two areas.

Among this site's distinctive features are online exhibits on African American life at the turn of the century illustrated with an early form of photography known as cyanotypes and a java-script program which automatically transcribes an 18th century letter.

Summary

Learning American history not only requires students to master content, but also to learn how to think fourth-dimensionally – that is to understand that our society's values and institutions are the product of an ongoing process of change. Students should not passively absorb historical materials but they need to learn how to conduct research, how to evaluate and interpret original sources, including visual and auditory sources, and to understand how seemingly disconnected events of the past interrelate. By providing teachers and students with comprehensive historical resources, including research guides, primary documents, and original interpretations, we seek to transform history into a much more active, engaged process of learning through doing. By participating in this project, students

Even more important to us as the Web site itself is the process by which this site has been created. Students have been actively engaged in both designing and developing this site, experimenting with new ways of presenting and displaying information, and devising ways to transform history learning into a more active process.

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Making the Dismal Science Relevant with Projects and Handheld Computers

John Mergendoller, Buck Institute for Education, US
Jason Ravitz, Buck Institute for Education, US

One-half of the states require high school students to complete an economics course before graduating. For most students, this encounter with the dismal science is a frustrating one. Economics is a complex and difficult subject, and students often struggle to make sense of its abstract concepts and laws which seem irrelevant to their lives.

One way to make economic concepts more meaningful to students is to use it to analyze the world they live in. We have developed an example unit that focuses on the fundamental economic concept of "demand," and employs handheld computers to aid students as they interview their peers to determine the actual demand for certain foods and concert tickets. Once the interviews are over, the handhelds are used to graph the results and transfer the data to desktop computers for further calculations and analysis.

This session will describe the project and demonstrate software program developed for the handheld. Attendees that have handhelds will be "beamed" the program so they can try it out by collecting demand data from others in the session (or elsewhere). They will be free to use it in their classes when they return to their schools.

The Buck Institute for Education is working with teachers to integrate handheld computers in to the classroom instructional process. The session will end with a discussion of the ways handhelds can be used by teachers and students and the distribution of relevant text resources and www links.

Integration of Technology in Elementary Social Studies Teacher Education: Adapting a Curricular Model

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Tanner and Tanner (1995) present a model of Curricular Sources and Influences to explain the development of the K-12 school curriculum. A graphic representation of their model shows the school curriculum in the center of a circle. Around the circumference of the circle are political influences, social influences, economic influences, and technological influences. These four types of influences affect each other as they help determine the decisions made by school boards, administrators, teachers, parents, and students. Specific examples of the four influences are governmental agencies, publishers and testing companies, professional educational organizations, and colleges and universities.

The Tanner and Tanner model (1995) appears to effectively describe curriculum development at the K-12 level, but may also be useful in understanding curricular changes at the university level. This study focuses on a series of curricular changes in a single course, Elementary Social Studies Methods, over a ten-year period. While there were many adaptations and adjustments in the course, this study will only examine attempts to integrate technology education into the course. The Tanner and Tanner (1995) model will guide the discussion.

Significant Stages of Curricular Change in Technology

1. *Get Ready!* In the earliest stage, the professor was the instigator of the curricular change. He wanted to alert the preservice teachers of forthcoming developments in technology (e.g., greater accessibility of the Internet) that would influence their elementary social studies classrooms. The nature of the change was limited to discussion because neither the university nor the students had access to the technology.

2. *Look at This!* When the federal government began to provide grants to universities for technology, the teacher education program used the funds to create a technology classroom. With this innovation, the professor (on his own volition) began to demonstrate some of the social studies applications of advanced technology (e.g., software to create time-lines.) Because the students still did not have access to the technology at home or school, there was no application.

3. *Get Your Feet Wet!* As an incentive to promote its new technology goals, an additional phase of state funding was offered to teacher education programs. The faculty leaders in technology used the funding too create computer labs in the College of Education. Now it was possible for students to access the technology even if they did not have the necessary hardware at home. The professor decided to require students to conduct Internet searches for social studies resources and use email to share their findings.

4. *The State Steps In!* The State Department of Public Instruction, concerned about reports of slow integration of technology in K-12 programs, began to require each teacher education program to demonstrate how it meets the state technology goals. In response, the teacher education professors met to assign competencies to each course. The social studies methods course expanded its technology integration with additional assignments and instruction.

5. *Take Your Work Home with You!* The personal computer revolution finally reached the point when, because of dropping prices and growing popularity, nearly every preservice teacher owned or had easy access to a computer. The professor began to encourage on-line submission of assignments by offering test point bonuses as an incentive. Most students were drawn to the incentive and subsequently developed considerable technological comfort and skill.

6. *Get Organized!* The computer revolution turned into a financial windfall for many companies. Several successful individuals and corporations invested their profits into foundations to promote technology education. Through this outside funding, professional organizations hopped on the bandwagon to create new organizations, conferences, and journals. In the field of social studies education, a group of young faculty developed a project to expand technology integration in their field. The professor of the methods course became involved in this project, and received further stimulation and training in technology. These experiences were translated into new components of the methods course, such as GSI and listserves.

7. *Here Comes the Test!* Dissatisfaction with the progress of technology integration in K-12 programs led the state to develop a testing program to force students to meet the competencies. After a series of invalid and unreliable assessments, student anxiety reached its peak when they learned that failure on the state test would delay their teacher certification. The testing program was then replaced by a plan to have each university develop its own assessment. The faculty responded by creating a simple form for students to demonstrate the technology competencies. They were required to meet 18 of the 24 competencies to graduate. In response, students in the methods course eagerly sought the technology education that was offered by the professor.

8. *Report Card Time!* The Department of Public Instruction began to survey teacher education graduates concerning the quality of their preservice experiences. The results of these surveys, combined with various test results, were incorporated into a "report card" that would be shared with the public. The university did not do as well on the first few reports as it would have liked. Technology was the main weakness. Interview data indicated that many recent graduates did not understand the competencies or felt that they received inadequate instruction. Further analysis revealed that many students took shortcuts in meeting the competencies, or sought out part-time faculty to sign off on their forms without providing evidence. In response, various administrators pushed for a new technology course that would be required for all preservice teachers. Because the proposed course would be taught separately, and not be integrated with the rest of the program, several members of the elementary education faculty, many of whom were strong believers in curriculum integration, were resistant.

In order to forestall the creation of a stand-alone technology component, the professors who taught the curriculum course and the social studies methods course devised a plan to integrate all of the technology competencies into their courses. Their proposal attempted to reduce the students' confusion, maintain control over assessment, and enhance the instruction in technology. Social studies methods became the primary course for technology integration.

Application of the Tanner and Tanner (1995) Model

The preceding saga fits the Curriculum Influences model, even though Tanner and Tanner (1995) designed it for explaining K-12 curricula. The curriculum of the social studies methods course appears to have been transformed by economic, political, social, and technological influences. The economic stimulus of state funding was an immediate influence on the use of technology in the course through the creation of technology classrooms and labs. After its initial economic impact, the political maneuvers of the State Department of Public Instruction, through its development of technology goals, testing programs, and report cards, became a major influence on the nature of the preservice curriculum. Social factors, such as the popularity of computers and the Internet, along with the university's public relations concerns, also played a role in shaping the curriculum. Professional organizations also played a significant role in the expectations and activities of the course. Of course, the role of technological influences cannot be underemphasized.

Implications

Integrating technology into the social studies methods course was not simply a function of adapting the technology for student learning. Professors must be cognizant of the social, political, and economic influences that advance or retard the process.

While economic and technological changes were helpful in transforming the course to the professor's goals, those influences may not continue to be positive. The downturn in the economy, particularly in the technology sector, may lead to a slowdown in student access to and interest in technology.

The political influences on education have been rapidly increasing over the past several decades. Recently, the power of the state has been expanding further into the domain of the university. Any curricular changes in teacher education must be planned with an eye toward the state's expected role. This may be the most crucial aspect of technology integration. Curriculum developers may not be well versed in governmental matters, and may have to change the ways they prepare for reform.

Real™ History: Using Multimedia Software to Introduce Historic Events and Promote Constructivist Principles in Secondary Social Studies Classrooms

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Abstract: Real Media Slideshow™ Basic software can be used to promote hands-on, peer-to-peer learning and collaboration in a variety of secondary social studies classroom settings. Teachers and secondary students can use the software to create powerful multimedia presentations that illustrate key instructional concepts and themes. This paper will outline the steps involved in researching, storyboarding, and constructing a presentation that illustrates an historic event in the Real Slideshow™ Basic multimedia format.

Introduction

Motivating students to learn about history can be a difficult task for many teachers. Real Networks™ Slideshow Basic is a dynamic freeware application that social studies teachers can use to motivate and inspire their students by allowing them to experiment with multimedia design in ways that are both creative and constructivist in nature. Creating animations in Real Slideshow™ Basic involve students in their own learning, even as the process creates a powerful learning environment for students. Animations such as those created in Slideshow™ Basic are "highly effective tool[s] for illustrating a concept" or historic events (Roblyer & Edwards, 2000). The research and design process promotes critical thinking, problem solving, and cooperative group interaction. Students are able to construct their own understanding of an event as they research, plan, and create the presentation.

Literature Review

Teachers who use multimedia programs, such as Real Slideshow™ Basic, recognize that students have different learning styles, that all students can learn, and that all students can have expertise. Multimedia is a "fluid" environment that requires the student to make decisions and evaluate the process continuously (Roblyer & Edward, 2000). This environment forces students to use higher order thinkingskills (Marchionini, 1988). Students who may not find other learning activities motivating, may find working on multimedia projects engaging (McCarthy, 1989). Working together in small teams on Real Sildeshow™ Basic presentations can also promote cooperative interaction, thus increasing learning, improving social skills, and promoting problem-solving behaviors (Cooper, et. al; Johnson & Johnson, 1989/1990; Slavin, 1980).

Planning the Project

Step One: Review Real Slideshow™ Basic Presentations

Before beginning the project students should review a variety of Real Slideshow™ Basic presentations (see Figure 1). In particular students should focus on the amount of scripting, the type of images, and the amount of audio contained in various Real Slideshow™ Basic presentations. Teachers can download or link to Real Networks™ Slideshow™ presentations at Real Networks web site.

Clayton University's Real Network™ Slideshow Tutorial http://learningcenter.clayton.edu/fidl/realslideshow/default.html

Real Network™'s Tutorial (Video File)
http://ramhurl.real.com/smildemohurl.ram?file=marketing/tools/slideshow/tutorialplus2banner/start.smi

Sample Presentations
http://ramhurl.real.com/smildemohurl.ram?file=marketing/tools/slideshow/tldemo/start.smi

Download Real Network™'s Free Slideshow™ Basic Software
http://proforma.real.com/rnforms/products/tools/slideshowbasic/index.html?key=L43591004037252

Figure 1. Online Tutorials For Real Networks™ Slideshow and Real Slideshow™ Basic.

Step Two: Research the Topic

A major component of the process involves researching topics, locating resources, and analyzing resources to determine their appropriateness to this multimedia format. Using Internet sites such as the National Archives or the Library of Congress (see Figure 2), students should carefully select a few powerful images that relate to one key event or t heme. Working with three to five carefully selected images and one audio filed is recommended for beginners.

Library of Congress, American Memory (http://memory.loc.gov)
African American Odyssey, American Folk Culture, Baseball & Jackie Robinson, Civil War Pictures, Great Depression, Native American Culture, Presidents and First Ladies, Slave Narratives, Women's Suffrage Movement

National Archives (http://www.nara.gov)
Constitutional Issues, Pearl Harbor, Powers of Persuasion, Korean War, Women's Suffrage and the 19th Amendment

Figure 2. Online Sources of Public Domain Images and Audio Files.

Step Three: Storyboarding the Project

Students can use sticky notes, storyboard sheets, or concept mapping software to assist them in storyboarding their entire presentation before they ever begin working in Real Slideshow™ Basic. Ideally, students should develop their presentation frame by frame. Determinations about the sequencing of images and the inclusion of text should be made at this point. Students might want to end the presentation with a final screen that displays one or two hyperlinks to site t hat further illustrate the contents of the presentation.

Step Four: Working in Real Networks Slideshow™ Basic

Real Networks™ offers basic advanced tutorials online to assist users learning how to create Slideshow presentations (see Figure 1). Peer tutoring and the team aspect of group work will allow more technologically literate students to assist their peers in developing the presentations. When assigning students to groups for this project, teachers may want to assure that at least one team member has computer experience with various multimedia software. While Real Slideshow™ Basic is an easy to use program that even novices can use effectively, it is a good idea to have a basic set of directions available for students to refer to while working at the computer (see Figure 3).

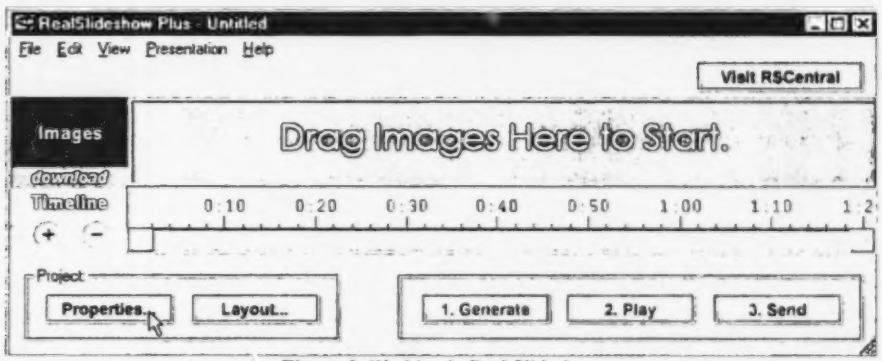

Figure 3. Working in Real Slideshow

Step Five: Publishing the Presentation

Once the graphics and audio files are inserted into Slideshow, the file should be saved to disk. The file can also be published to the Internet if viewing by a wider audience is desired. However, if copyright protected files are used, permissions should be obtained before publishing to the Web. Playing the file either from disk or online will require a media player, such as the free version available from Real Networks.

Step Six: Using Slideshow™ presentations in the classroom

The teacher should assist students in creating questions that lead to discovery. For each presentation, students should prepare a list of questions for the entire class that spiral from the basic to the complex (Teachers Curriculum Institute, 1998). The slideshow is the primary source around which student inquiry occurs.

Conclusions

Having students construct a multimedia presentation in Real Networks Slideshow™ Basic takes little more time than constructing a presentation in Microsoft PowerPoint™ or Hyperstudio™. But the benefits are just as great for students. Not only do students get experience in using multimedia software that is a popular standard on the Internet, but they also gain cognitive benefits from constructing their own knowledge of the historic events. This kind of project is more meaningful because it challenges students to research, plan, and create an original presentation. During the process, they exercise critical thinking skills while constructing their own understanding of historical events.

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Creation of an interactive slideshow challenges students to conduct historical research, make choices about the quality of media files included in the presentation, and learn how to plan, design, construct, and publish a multimedia presentation. Creating a Real Slideshow™ Basic presentation also allows students to reflect on the project by discussing what went well, what needs to be improved or revised, and what else can be done with the Slideshow™ Basic software

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Linking history, technology and teacher education: The Allen Parker slave narrative

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Abstract: This is the story of how a slave born in 1838 is leading students and faculty at East Carolina University into the technologically-advanced 21st century. Allen Parker was a former slave from northeastern North Carolina who published a narrative of his life in 1895. Pursuing his story has led professors and graduate students in 2001 to integrate technology into their classes in History and Teacher Education as a natural part of the learning process. The Allen Parker Slave Narrative website is a doorway to his world, just as his narrative has been an opening to the world of 21st-century technology.

Introduction

As the Internet evolves, there is a growing realization that new technologies can help teachers move beyond traditional instructional strategies to more dynamic methods that reach a multitude of learning styles (Fraser, 1999; Clark & Cunningham, 1999). When approaching new technologies, teachers tend first to duplicate familiar, traditional forms of instruction. As they gain experience and their comfort level increases, they can move beyond traditional forms to use new technologies in creative ways (Fraser, 1999).

One effect of computer-enhanced instruction can be a revision of the traditional role of the teacher from authoritative expert to supportive guide. The teacher becomes a co-explorer with students (Kandies & Stern, 1999). In this student-centered learning environment, the student assumes more responsibility for constructing his or her own knowledge (Kandies & Stern, 1999). In addition, technology allows new forms of communication that change interaction patterns between students and teacher and encourage the development of a community of learners (Kandies & Stern, 1999). The possibility of communicating easily outside class meetings bridges the time lapse between in-class interaction which can extend, in some cases, up to a week. Such a transformation occurred with the Allen Parker project, which involved professors, teachers and students from two university courses in different disciplines.

This is the story of how a slave born in 1838 is leading students and faculty at East Carolina University into the technologically-advanced 21st century. Our project began with a traditional History course on slave narratives in American History. The class project was to research the accuracy and context of a narrative published in 1895 by Allen Parker, a former slave from northeastern North Carolina. Technology in the form of a website, a class listserv, email, digital cameras, and streaming video created a class synergy that transformed individual research efforts into a rich, collaborative historical discourse and allowed the class to move beyond expected results. Students in the History class published their research as an interactive, educational website that, in turn, enhanced learning and teaching of History for teacher education students seeking to teach social studies from multiple perspectives.

The next step in the Allen Parker project was to make the information available for teachers and students of all ages in Eastern North Carolina. A casual conversation between a student from the History class and a professor from teacher education generated the next phase of the project—collaboration between History and Social Studies students.

One of the goals of the advanced social studies class was that teacher education students use technology to transform their teaching. The professor modeled for them how classes can be student-centered and how they can require students to co-construct their knowledge through the use of technology. Students researched social studies information on the web and integrated that information into their teaching. Students were also encouraged to use historical information from the context of their communities in eastern North Carolina. They exposed their own students to the Parker narrative and used it to generate lesson plans that were placed on the web as a resource for other teachers.

Parker's story served as a launching pad not just for learning historical information from new perspectives, but also for showing the professor and students how new technology can provide new ways of interacting and learning. The transformative process began at the university level with professors and students whose learning experience was altered by technology. Through teacher education classes, it extended to elementary students in classrooms in eastern North Carolina.

Allen Parker

Allen Parker was born on a plantation in Chowan County, North Carolina, in 1838. Like thousands of his African-American contemporaries from eastern North Carolina, Allen Parker escaped from slavery to Union-occupied territory. After serving in the Union Navy, he migrated to the Northeast eventually settling in Worcester, Massachusetts. There he spent the last decades of his life selling popcorn and homemade candy for a living and watching his four children die in their youth from diseases no longer a threat today. He later joined the Worcester chapter of the Grand Army of the Republic, a fraternal organization for Union veterans, and made an extended trip to London in 1905. His obituaries in 1906 describe Allen Parker as "one of the best known colored men in Massachusetts." Although he never learned to read or write, in 1895 Parker published a short narrative of his life as a slave in Chowan County.

Allen Parker Leads Historians to Technology

Dr. David Cecelski, Distinguished Whichard Professor in the Humanities at East Carolina University during 2000-2001, discovered a rare copy of the Allen Parker narrative in a library in the Midwest. He designed a seminar course in which the students would focus on slave narratives from Eastern North Carolina, and would do a joint research project on the Allen Parker narrative to verify its details and place it within a historical context. Joyce Joines Newman, Instructional Technology Consultant for the College of Arts and Science at East Carolina University, was a non-traditional student in the class. She provided technical support to faculty and students as the Allen Parker project led them to incorporate more complex technology into their instructional strategies.

From the beginning, students themselves introduced technology into the History course through the establishment of a class listserv by one student and the creation of a web site for the Allen Parker slave narrative by another. This was done with consent of Dr. Cecelski who lacked technological experience himself but was receptive to the idea because of his student-centered teaching style. In the class were several non-traditional students who were extremely self-motivated. These factors allowed technology to become an integral part of the research and documentation process itself.

Technology altered class dynamics by facilitating a sense of unity and shared purpose among class members whose project was to verify the factual information in the Parker narrative and gain insight into its social and historical context. To do that, individual students accepted responsibility for researching different aspects of the Allen Parker story, using traditional research methods including spending hours alone reading dusty archived materials. Since each student was researching a unique but important area, each had to be successful and productive for the research to be complete. Each person had strengths within

the project, and their weaknesses were ameliorated by the strengths of others. Class members also acted as peer reviewers. When there was a conflict of information or a difference of opinion about accuracy or interpretation, class discussion and consensus resolved the issue.

Communication through the listserv reinforced the learner-centered, proactive format of the course. Messages were channeled through the campus email system, which let students communicate their findings as they occurred, and allowed them to receive immediate compliments, encouragement and feedback, generating a class synergy that kept them moving forward in their project. This maintained the emotional momentum of the class between once-a-week meetings, defined a sense of purpose among class members, and created a stronger sense of group identity than occurs in many courses. Class field trips to Chowan County and the Peter Parker Plantation also strengthened group bonds and provided an opportunity for the use of additional technological tools. Members of the class made digital videotapes and still photographs which they posted on the website as streaming video and linked images.

At the end of the semester, as the class finished their research, Dr. Cecelski edited their annotations and they were posted on the Allen Parker web site in pop-up windows accessed through hyperlinks. These annotations provide supporting evidence, explanations and references for the narrative. It helped that Allen Parker turned out to be a remarkable subject for research and that serendipity frequented the project. Not only did the students locate the plantation where he was born, but it is still a working farm owned by descendants of the family who received the original grant from Lord Granville in the early 1700s. When they looked for Parker's pension records in the National Archives, they found not just a few pages of information. Instead, questions about his Naval service and the legality of his marriage had generated 177 pages, including depositions from family, neighbors, and doctors that provide an unexpected physical and personal portrait of Parker.

It was an exciting time as the students watched their bare bones research assume a fleshed-out form. The web site was developed as an educational resource providing social and historical context for the narrative--timelines, maps, images and original documents. There are links to websites with related images and information. Content derived from course lectures and readings, primary and secondary sources in libraries and archives, oral interviews, web research, interlibrary loan, field trips, contacts with community members, email, telephone conversations, and collaboration with faculty at ECU and other universities.

Perhaps the most interesting aspect of the Parker project in terms of using technology is that the technology reinforced the format of the class, which was a collaborative effort requiring the cooperation and active participation of each member of the group. While many courses that involve research require each student to work independently and competitively, this project relied on the sharing of information and the subordination of personal ego to the group's goals. The fact that individual contributions are not identified on the web site underlines the interdependence and collaboration among all class members. The web site presented research results as a complete and seamless visual product, which enhanced the sense of accomplishment by the group as a whole.

Allen Parker Links Teachers With History and Technology

Allen Parker's influence on students and faculty continued through collaboration with Dr. Joy Stapleton of the Elementary and Middle Grades Education Program and graduate students in her course on Teaching Social Studies in the Elementary School. Members of the class included full-time graduate students and teachers from elementary schools in the surrounding area. As part of a midterm exam each student developed curriculum-compliant educational activities based on information in the Allen Parker slave narrative. Posted on the Parker web site, each project includes an overview, standards, materials, children's literature, activities and references, making the site a collaborative, interdisciplinary effort and a resource for public school teachers throughout the state.

The course was designed to challenge teachers to become familiar with the supplemental social studies information that is available on the web and to encourage them to integrate the information and the use of technology into their lesson plans. Most of the students were aware of lesson plans on the web, but were

not aware of the array of information that they could use to supplement lessons. The course utilized online modules, email communication, and extensive reliance on web technology including research activities and online course materials (in Blackboard courseware).

During the class, the web shifted from being just a resource tool for teachers to being a supplemental instructional tool for their students. The professor modeled good web sites and then sent students out on the Web looking for similar sites that could enhance instruction for their grade level. Students found that the web could serve not only as a source of information to enhance their lesson plans, but that there are many web sites designed as educational tools to be used by children themselves. For example, web sites that could complement the Allen Parker narrative ranged from sites tracing the Underground Railroad with concrete images of houses along the route to sites with simulations that involved decision-making and higher-order thinking skills. In addition to using the web as a resource, teachers published information on the web for others to use.

The Allen Parker project moved to a new phase with the addition of lesson plans developed for elementary school teachers. The addition of these plans made the Parker web site a more robust tool for teachers in eastern North Carolina. Teachers can now use the web site to integrate primary sources into their classrooms as well as to teach the potentially controversial topic of slavery and race relations.

True to the learner-centered nature of the project, students and faculty from the two courses came together at the end of the semester to learn from each other's experiences with the Allen Parker narrative. Educators questioned historians about community resources and research strategies. Historians asked about such rich historical information could be presented to young children in meaningful and creative ways. This event was recorded in 35 mm photos that were scanned and posted on the website.

Final Thoughts and Comments

The Allen Parker Slave Narrative Site is an example of how technology can transform teaching at all levels. The creation and use of the project web site changed courses for students of many ages. It was used as a vehicle to move to more technologically-enhanced forms of research and communication. There are numerous web resources for teachers who are interested in using computer-assisted instruction. For example, there are sites with electronic text collections, primary history documents from around the world, transcripts and audio for key historical speeches , documents pertaining to slavery, African-American history pages, digital images of African-American life, or excerpts from other slave narratives. The same is true for other ethnic communities as well as for other Social Studies topics.

We encourage teacher-educators to model computer-assisted instruction for their students through the use of web sites, communication, course software, multimedia, and digital imagery. Teachers tend to teach the way they are taught, so that such modeling will eventually result in a far-reaching transformation of the teaching and learning process, affecting not only university students but also the children they teach. Technology-based instruction has become more important as we prepare students to be competitive in this age of information. The Allen Parker Slave Narrative website is a doorway to his world in the past, but it has also served as an opening to the world of 21st-century technology.

Sample Web Sites

Virtual Jamestown: This site is an interactive collection of documents, maps, images and other resources relating to the Jamestown settlement.
http://jefferson.village.virginia.edu/vcdh/jamestown/

The Valley of the Shadow: Two Communities in the American Civil War: This site contrasts two communities as they experience the Civil War from opposing perspectives, one Northern and the other Southern
.http://jefferson.village.virginia.edu/vshadow2/

Documenting the American South: North American Slave Narratives: This site contains electronic texts of all narratives by fugitive and former slaves published before 1920.
http://docsouth.unc.edu/neh/neh.html

History and Politics Out Loud: This site contains a collection of politically significant audio materials, including speeches and radio broadcasts.
http://www.hpol.org/

U. S. Historical Documents Regarding Slavery: This site contains links to a variety of U. S. historical documents regarding slavery.
http://www.bungi.com/cfip/slavery.htm

Third Person, First Person: Slave Voices From The Special Collections Library: This site contains rare materials from Duke University collections on slavery in the 18th and 19th centuries.
http://scriptorium.lib.duke.edu/slavery/

Abolition and the Underground Railroad: This site consists of a virtual database with content related to elementary curricula.
http://lcc.boston.k12.ma.us/x1/abol/abol.asp

Black History Pages: This site has links a variety of African American history sites.
http://blackhistorypages.com/

Digital Schomburg Images of 19th Century African Americans: This site contains a selection of visual resources on African Americans in the 19th century.
http://149.123.1.8/cgi-shl/vsc30b.exe/schomburg/images_aa19/toc.html?E+nyplbeta

National Geographic: The Underground Railroad: This is an interactive, experiential site about slavery that includes images, maps and a simulated journey on underground routes.
http://www.nationalgeographic.com/features/99/railroad/

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Using Digital Image Editing to Step Back in Time

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This session is geared towards Kindergarten through university level educators who are interested in integrating technology into instruction. The presenters will share their experiences with instructing elementary pre-service teachers from the Curry School of Education at the University of Virginia to use Adobe Photoshop in effective ways when teaching to elementary social studies standards. This group of pre-service teachers collaborated with fourth grade teachers in a local school to develop curriculum materials to teach the Virginia history Standards of Learning. Using Adobe Photoshop, the pre-service teachers superimposed digital images of fourth grade students taken with a digital camera into historical artifacts. The virtual history lessons were taught using the digital images of the fourth grade students as writing prompts to excite the students about the content.

With this workshop, the presenters propose to introduce Adobe Photoshop as a means of inserting digital images of people into digital copies of historical artifacts to make teaching history standards more meaningful. The participants will learn how to use digital cameras to capture digital images of themselves and make them ready for use in an image editor. They will then explore Library of Congress' American Memory photograph archive and learn how to efficiently use Alta Vista for image searching of historical images on the Internet. Once the participants have digital images of themselves and a historical photograph, painting, or image, they will learn the basics of image editing to superimpose their picture onto the historical item in Adobe Photoshop.

A Model of Professional Development for History Teachers: Technology Supported Discourse to Support Action Research on Technology Supported Discourse

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Abstract: In a professional development program conducted by the California History - Social Science Project, K-12 teachers' explore using discourse as a tool in their classroom. They are introduced to a model for discourse use, specifically on-line discourse, and develop supports for their students use of it. They then go back to the classroom and, using an action research model, implement the use of discourse with their supports. They report back to the group using an online environment. This online environment itself acts as their support and incorporates many of the same discourse tools and supports they are using with their students.

Introduction/Background

The California History-Social Science Project (CH-SSP), is a legislatively-mandated professional development program, one of nine California Subject Matter Projects, administered out of the University of California, Office of the President. The Executive Offices are based at UCLA, and oversee seventeen local sites across California. The CH-SSP is committed to improving the teaching and learning of history-social science for all students through: strengthening disciplinary content knowledge as outlined in the California History-Social Science Content Standards ; promoting the study and teaching of history-social science from a multi-cultural perspective; fostering historical inquiry through the interpretation primary sources, exploring cause and effect, creating historical narratives, and considering the nature of change; enhancing instructional strategies to promote accessibility to the discipline; promo ting collaboration across grade levels; enhancing teachers' use of technology as an integral part of the instructional process; and developing teacher leadership.

The CH-SSP Teacher Researcher Initiative Project (TRIP) engages teachers in action research on the use of technology-based discourse tools to support historical thinking and understanding. This project has grown out of a teacher professional development project in 1999 and 2000 which encouraged the exploration of the use of technology in K-12 classrooms through the development of lesson plans. At the end of those two years we felt that, although the lesson plans were exemplary, the teachers were not approaching the use of technology from a perspective of the potential for fundamental instructional methodological change in their classrooms. As we examined our approach, we decided that the focus on lesson plans, a standard product of teacher professional development programs, was deterring from the teachers focusing on some of the fundamental instructional issues we were trying to engage them in. In 2001, we switched to an action research model, one that we posited would result in more reflection and experimentation. As a result of this paradigm shift, in January and August 2001, thirty-four teachers from across California conducted research in grade 3-12 classrooms with diverse student populations. Participation by the teachers varied, as about 20% were unable to finish their research. The rest finished their research and wrote papers. Of these papers, 60% focused on discourse and about 40%

focused on the use of multimedia in the classroom. Of those that focused on discourse, their results for students were also varied, however, there were across the board significant gains in student motivation, student participation and significant gains made by low performing and ESL students. This project has been modified in response to feedback from the teachers and will be repeated in January, 2002 to include thirty new teachers and twelve repeating teachers.

Purpose/Theoretical Perspective

The primary purpose of the professional development is to engage and support teachers to investigate instructional methods that support students' development of historical thinking and understanding, and to investigate using technology to support the instructional methodology in ways that could not be done without technology.

Fundamental to how we approach the professional development is our approach to history. We approach history as a discipline as opposed to a subject (Stearn, 1993). Discourse in the History/Social Science classroom supports students in externalizing thinking and in creating cultural supports for thinking (Bain, 1998). For teachers, this requires that they provide social assistance (scaffolding) to the learners to support the necessary competencies through which the historical thinking and understanding can emerge and be internalized (Vygotsky, 1978). Technology based tools can provide this assistance (Salomon, 1988). We model this approach with the professional development. We approach the teaching of history as a discipline. We engage in discourse with cultural supports to externalize the teachers' thinking. Action research provides for inquiry through reflection, it brings the unconscious to a conscious level (Schon, 1996). The teachers' understandings can emerge and be internalized. Technology tools are used to support this.

Discourse and action research are therefore, central to this professional development approach. We see discourse as a creative process in which a shared understanding is created (Bohm, 1996). To engage in discourse is to engage in both the disciplines of history and education. It is reflective and iterative in nature. It involves social assistance and the use of tools. Scaffolding is provided by the professional developers (facilitators). Tools are non-electronic (small group discussion, writing) and electronic (email, bulletin boards, chat, threaded discussion, electronic annotation).

Action research is also a process. It is a way to engage with classroom teaching and bring more of it to a conscious level (Hopkins & Antes, 1990). It is reflective and iterative in nature. Reflection encourages the challenging of ones existing theories and preconceived views of teaching (Kettle & Sellars, 1996). Action research involves social assistance and the use of tools. As with discourse, scaffolding is provided by facilitators (coaches) and tools are both non-electronic and electronic.

As elements of both of these processes we engage in reflection, collaboration and inquiry.

Technology Supported Discourse and Action Research

We see our professional development model as a system of people, practices, and technologies. The human activities are served by the technology (Nardi & O'Day, 1998). It's parts consist of facilitators, teachers and students; the practices of discourse and action research, in the disciplines of history and education; and the supporting technologies.

Teachers participate in online pre-institute discourse activities, then spend three days at UCLA starting the research process (see below). Back in the classroom, they implement their action research. Finally, they write up their results for dissemination. In total, this is a five to six month commitment.

The action research process consists of six overlapping stages

- First, they question their assumptions about the disciplines. Through online discourse before the institute and in person discourse during the institute, the hidden assumptions that we all have are brought to the surface.
- Second, they pose a problem (research question). They will discuss these with the other teachers and give other teachers feedback on their problems.
- Three, as each teacher focuses on one problem, one aspect of their teaching, the plan for the solution should emerge (research plan) and worked out collaboratively.
- Four, they will implement the action research plan in their classroom.
- Five, both qualitative and quantitative data will be gathered by all teachers, analyzed and shared with peers to assure the highest level of reliability and validity possible.
- Six, the process and the results of the action research are documented, peer reviewed and disseminated.

The first three stages of this process are the most difficult for the teachers and are the point where substantive scaffolding needs to be provided by the facilitators for the teachers. Primarily, scaffolding needs to be provided in the area of online discourse and in the conceptualization of the action research. In 2001, the scaffolding involved working in small groups and having consistent electronic contact with other group members and with facilitators using a variety of electronic tools including chats, email, and threaded discussion. These small groups worked independently. The outcomes of the groups varied tremendously, with the single most telling factor being the provision of scaffolding by the facilitator. This year, to provide a more uniform experience for the teachers, we have decided to have all of the participants work in one electronic environment. There is flexibility in this environment to break into groups, yet, still remain communicating with the larger group. Blackboard.com is the environment that we will be using. This environment allows us to engage in online discourse with the teachers to model the use of online discourse. In this environment, the teachers will engage in the same kind of discourse – discipline-based and related to activities – that their students will be engaging in. Scaffolding of various kinds will be provided by the facilitators. This will include providing supporting materials; developing both directed questioning and providing for open ended discussion of the research; providing prompts on thinking about the issues; and notification when responses are posted. This year, the scaffolds that are used and their success in assisting teachers to engage in both research and discourse, will be a research focus for the project.

Technology Supported Discourse in the Classroom

The focus of all of the action research plans is on some aspect of the use of technology supported discourse. Although in their research process the teachers may identify many problems, they are asked to focus on those which involve discourse as a solution. Their use of discourse as a solution uses technology as a tool. For the teacher, this expands their discourse tools in the classroom. How the technology is used for discourse, under what circumstances, with what scaffolding tools, and with which students is what each teacher explores individually.

The creation of teacher generated supports, or scaffolding tools, for technology supported discourse was an area that many teachers struggled with. For most of them, this meant developing supports of a type that they had never developed before. A wide variety of tools were used, from specific to general, sometimes without the teacher understanding that they were using them. For a databased discussion group, one middle school teacher used very explicit pull down menus with prompts for the students and reminders of what they should be thinking about when they are participating in on line discourse. These prompts were both discipline based and writing based. The disciplined based prompts supported the students in thinking like a historian. For instance, they remind the student to seek corroborating evidence for their conclusions. The writing based tools supports addressed how the students should be crafting their answers and what depth of answer was expected of them at various times. For a different form of online discourse – chat rooms - a high school teacher provided a different form of support. In this case, he provided real time scaffolding in an environment where the students were conducting a historical discussion. These prompts consisted of crafting the discussion, helping students stay on task, providing questions to help them expand, clarify, question one another, predict and engage in historical thinking and understanding. This form of online communication also seemed to require more scaffolding for appropriate responses and to keep the students from diverging from the focus of the chat. These teachers and

others expressed in their papers the need they had to better develop these teacher generated support tools and to have more support in this activity. In response to this, the use of appropriate scaffolding in different online media, for different students, for different purposes is another major research focus of the 2002 work.

Preliminary Results

There are two areas of results. The first is the results from the professional development, the second is the results of the action research.

In 2001, twenty of twenty-six teachers submitted final papers, a much higher percentage than anticipated. Eight teachers will be submitting papers in December. The positive indicators for the professional development included:

- renewed enthusiasm for participating in discourse activities in their classroom,
- a deeper understanding of the nature of discourse activities,
- a change in the way they approach thinking about activities in their classroom,
- a change in the way teachers perceive their students, particularly low performing students,
- more perceived and actual choice of instructional methods and instructional tools.
- A greater understanding of the role of scaffolding supports in their classroom and a greater ability to develop and implement them to support online discourse.

For a number of teachers, they felt this experience completely changed the way they thought about their approach to teaching history. Most teachers felt some positive change in their thinking about historical thinking and understanding in their classroom.

There were a number of difficulties with the professional development. They included:

- The level of discourse between teachers was not as high as we had hoped.
- A number of teachers were very focused on multimedia for classroom use. These teachers tended not to explore the discourse issues.
- Inconsistent facilitator support across groups.
- Last minute technical difficulties with the planned online environment.

We believe that the environment, and the occasional lack thereof, was primarily responsibility for these results. Our belief is that the changes we discussed above will addressed these difficulties we have had.

The preliminary positive results of the action research, across teachers, were:

- Motivation to participate in technology-based discourse activities was much higher than to participate in non-technology discourse activities. There was nearly 100% participation.
- Non-technology discourse activities were positively affected, both in the level and amount of participation.
- Low-performing and English as a Second Language students showed the greatest gains in participation, understanding and their ability to express their ideas.
- A significant percentage of students used historical thinking and understanding.
- Misconceptions were diagnosed and mediated much early than in the traditional classroom.

In particular, we found the results with low-performing and ESL students to be unanticipated and very exciting. As a result, we are making this an additional research focus for the project in the year 2002.

There were a number of difficulties with implementing the action research, including:

- lack of principal and school support,
- lack of appropriate technology,
- lack of technical support at the school,
- competing demands on classroom time,
- competing demands on lab time.

These are difficult to address as they are out of the control of both the classroom teacher and the professional developers. We will be communicating more closely with the principals this coming year, to try to develop more support within the school environment for the teachers engaging in this research.

Results from eight more teachers are expected in December 2001. Thirty more teachers will be participating in January 2002. Their work is expected in May 2002.

Conclusion

Discourse is an important methodology both in professional development and in History/Social Science classrooms (Schon, 1983, Vygotsky, 1978). The traditional forms of discourse used in the classroom, in-class discussioin, small group discussion primarily, most facilitators and teachers find limited. By engaging in professional development which uses action research and technology supported discourse, teachers themselves become immersed in an iterative, reflective environment which encourages the externalization of their thinking. It also immerses them in the 'doing' of their discipline. This gives the teacher a solid experiential and methodological foundation on which to develop and expand, using cultural supports and technology as a tool, the forms of discourse being used in their own classrooms. This approach can open the teaching of history from a subject which teachers teach and students take; to a discipline, where technology supported discourse leads to historical-thinking and understanding as core student processes.

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History Education Online:
A Critical Analysis through Focus Groups

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Introduction

Meaningful, integrative, value-based, challenging and active teaching and learning are vital for effective online discussion. Powerful online teaching and learning suggests establishing a framework focusing on content, connectivity, and community (Brown, 1999). More specifically, this framework necessitates setting a positive learning environment, establishing a learning community, building in powerful pedagogy, establishing rights and responsibilities, using open-ended discussion and activities, and focusing on discussion organization and management. Vital needs for all involved that will also be discussed include establishing ongoing support and follow-up, social context for learning, communication, toleration, and intrinsic motivation (White and Weight, 2000). Essential components for effective online courses, appropriate netiquette, and the role of the facilitator will also be investigated.

Successfully integrating technology in social studies classrooms is a vital issue facing social studies educators. Unfortunately and all too often, problems occur when social studies teachers are presented the new technology, expected to implement it, then left to battle alone with their own issues regarding effective integration. Nevertheless, technology skills are now essential for social studies teachers and students and technology provides innovative potential for meaningful teaching and learning.

Online teaching and learning is relatively new in teacher education and especially in our schools. Only in the last few years has there been even minimal research and literature regarding issues, trends and effective teaching and learning online. There is even less research in the merging of online courses and social studies education. Perhaps a key issue is ensuring effective learning in an online environment. Jonassen states that there are four paramount attributes of constructivism that facilitate an effective learning environment including: (1) providing opportunities to foster personal construction of knowledge; (2) setting an appropriate context for learning; (3) facilitating collaboration amongst learners; and (4) facilitating learning and collaboration through conversation (1995).

Issues dealing with learning via technology (online teaching and learning) suggest developing a constant awareness regarding dialog, discussion, and discourse as we hope to establish collaborative learning communities. Research suggests that online teaching and learning can encourage otherwise silent students to participate, can promote the ideal of serious dialog regarding comments, can facilitate discussion on issues and themes that are unlikely to be approached effectively in classrooms, and can facilitate the development of collaborative learning community (Weisser, 1997; Parkyn, 1999; Swartz and Hatcher, 1996). Parkyn (1999) suggests specific pragmatic details vital for effective online learning including detailed instructions and expectations, monitoring, etiquette, and equal involvement of all (including the instructor).

Within a social studies framework, an online teaching and learning must focus on knowledge, skills, and attitudes related to social education. It must also address the components of powerful social studies teaching and learning including approaches that are meaningful, integrative, value-based, challenging, and active. The ultimate goal might be the transformation of social education to a student-centered, problem-based, critical analysis focus (White, 1999). History education at both the college and secondary school levels persists in using traditional teaching methods, usually using teacher-directed approaches. The goal of this project is to develop new forms of history education that draw upon online resources and transform history teaching into a more student-centered, interactive experience. The objective is to give students more meaningful, active learning opportunities through project-based activities and the ability to integrate new technologies into their coursework.

Technology-based curriculum and instruction offer a way to help students develop the skills characteristic of history as a discipline: the ability to conduct research, to analyze primary sources, to weigh evidence, and develop coherent

interpretations. New technologies offer a cost-effective way to give students access to primary sources and to create a multimedia projects.

For the past year, professors at the University of Houston in both history and education have collaborated to develop a comprehensive collection of online history resources drawing upon original scholarship and the documents and images in the largest private collection of American history documents, the Gilder Lehrman Collection, on deposit at the Pierpont Morgan Library in New York. Featured in the February 15, 2001 *Wall Street Journal*, the site is located at http://www.gliah.org. It contains over 1,500 active pages, including a comprehensive online U.S. history textbook; a searchable database containing the transcripts of over 600 primary source documents; glossaries, timelines, bibliographies, annotated hyperlinks, and essays on such topics as the treatment of American history in film and the history of aspects of private life.

The site, which complies with the latest standards for accessibility under the Americans with Disabilities Act, has a dynamic, database-driven design. Documents, texts, hyperlinks, and images have been placed in a searchable, relational database. \Among this site's distinctive features are online exhibits on early African American life illustrated with an early form of photography known as cyanotypes and a java-script program which automatically transcribes an 18th century letter.

The lacking element in this site has been pedagogical. Many teachers do not know how to effectively incorporate Internet resources and primary source documents into their teaching. In social studies, technology is often used as an add-on, available when the "real work" is finished, or as a reward for good behavior. These occurrences are due in part to the assumption by administrators and teachers that the training needed to implement technology effectively is too extensive and too technological or, on the other end of the spectrum, that the training can be done with one long and usually unproductive in-service session quickly forgotten as the year progresses. A false over-reliability or even blind acceptance of technology in schools also causes these issues.

Many well established teachers ask why they should use technology in social studies when there are successful methods already being used within their classroom? The issues presented in this paper focus on making social studies a more powerful and meaningful experience through technology integration in hopes of meeting students learning goals and meeting the needs of facilitating a critical and active citizenry. What society demands our children be able to do when they leave the educational system is much different from what it was as few as ten years ago. They must be proficient in using technology and understand the implications of its use in the future as well as how it has effected us in the past. Social studies teachers must modify the old style of teaching to fit the new way of learning. Social studies is not just about covering content; it is about analyzing content and developing social skills and attitudes, all with a critical thinking and problem solving focus.

Technology also has the ability to make learning exciting and worthwhile, allowing students to interact with the computer as well as other students while observing and acquiring the most current information on places they would otherwise never experience. We, as educators sometimes fall into a trap of anesthetizing the students ...[There's] not enough stimulus (Sizer, 1992). Implementing technology can wake up those sleeping students as well as promote a motivation to learn independently. We focus too much on extrinsic motivation to ensure learning; perhaps technology integration can facilitate a movement toward more intrinsic motivation. This should be the goal of every social studies teacher and can be developed and fostered quite effortlessly in a technological classroom.

The role of technology in social studies teaching and learning can be much more meaningful and powerful. If we are truly interested in promoting a social studies that goes beyond traditional transmission to a more transformative knowledge, skills, and attitude development that facilitates an informed and active citizenry, then technology must play a more central role. Many of the excuses that pervade successful social studies technology application including content coverage, time, availability, training, and traditional praxis should be addressed. There really is no excuse if we keep in mind the ultimate goals of social studies education.
This project attempts to provide the connection between the wealth of documents and resources at the Gilder Lehrman site and actually using them in a classroom.

Many well-established teachers ask why they should use technology in history courses when there are successful methods already being used within their classroom? The suggestion is not to change the instructional methods that work, but making history a more powerful and meaningful experience and meet the changing needs of society and

future leaders. What society demands our children be able to do when they leave the educational system is much different from what it was as few as ten years ago. They must be proficient in using technology and understand the implications of its use in the future as well as how it has affected us in the past. History teachers must modify the old style of teaching to fit the new way of learning. History education is not just about covering content; it is about analyzing content and developing social skills and attitudes.

The Project

One of this project's major objectives is to ensure that instructors at the secondary and college levels are able to meet state and national standards concerning content, pedagogy, and technology integration, including Texas Essential Knowledge and Skills; Texas Technology Applications for Teachers, and the National History Standards. Program curricula has been designed that support these standards and base student assessment on these standards through a variety of means such as online quizzes, rubrics, and student-centered projects.

This project has three primary goals: (1) To develop a database of activities that will allow instructors at the introductory college and secondary levels to incorporate these resources in their courses; (2) to educate prospective teachers to use technology effectively in their history classes; and (3) to test these activities in an actual U.S. history survey class classroom. The participants--a historian who regularly teaches the large U.S. history survey class, a specialist in instructional technology; and a specialist in teacher education and social studies education, have brought complementary talents to this project.

The project established support for the development of an ongoing focus group including teaching of middle and high school American History. These participants initially worked with faculty members to ensure that the materials designed would be pedagogically sound, meet state and national standards, and be motivating and interesting to students.

The seven participants are meeting once a week for approximately an hour. The initial charge is to explore the project web site in detail. Participants were asked to meet twice and engage in "getting acquainted" activities. Subsequent meetings dealt with generally discussions regarding technology in history education, history education, and the status of teaching and learning in general. Additional meetings focused on general web site discussions and specific discussion on various web site components.

Eventually participants decided that web-based interaction would enhance project development, evaluation, and application. Consequently, web-ct was employed for weekly sharing and discussion and real time chats were conducted twice a month. Web-ct also enabled various postings, web development, and web application ideas.

Evaluation

Data from formative evaluations were collected through a wide range of procedures and instruments, including questionnaires, performance assessments, examination of student- and teacher-produced products, learning and teaching journals, observations, interviews, focus groups, video and audio recordings, anecdotal records, and open-ended critiques. Progress toward accomplishing project goals and objectives has been disseminated on the project Website and through a formal report.

Project activities and research are in the process of being developed and disseminated by the project directors, other local, state, national and international social studies faculty and students, in a number of ways. These include, but are not limited to, (1) creating and presenting professional development workshops and seminars offered to local school campuses, districts and education institutions; (2) developing and presenting progressive critical constructivist teaching and learning models that integrate multimedia technology and the social studies at conferences and forums including the Texas Council for the Social Studies, National Council for the Social Studies, and other progressive general education organizations; (3) engaging in field based research and co-authoring manuscripts for journals, monographs and books; and, (4) the uploading of all projects developed to ensure local, state, national and international availability via the Gilder Lehrman web site for downloading.

Following are initial questions provided to participants to facilitate discussion (some are obviously demographic needs):

Gender – 5 M, 2 F
Subjects taught at present – 7 Am. History
Grade – 3 8th grade, 4 11th grade
Years teaching – 3 with 2 years or less, 4 with more than 2 years
Degree – 6 working on M. Ed., 1 working on Ed. D,

Personal use of internet – all use daily
Use of internet in teaching – 4 use daily, 2 weekly, 1 less often
Positive features of technology in education – variety, research, resources, information access, interest level, graphics, can go beyond the text
Issues with technology in education – information overloads, tech as a tool, availability, support, censorship,tech for tech sake, effective integration
Positive features in schools – increased access
Issues in schools – TAAS, accountability and achievement, content for content sake, costs
Positive features of history in schools – cultural awareness, social skills, learning skills, critical thinking, exploration, beginning to move beyond transmission of facts
Issues with history in schools - coverage, textbook, testing, too much reductive knowledge: essential knowledge privileged over contemplation of the issues; in other words, most students are not expected to, nor are capable of, actually making history, they can only memorize it

Specific questions addressed during various discussions of the focus group (with sample responses) include the following:

How can the site assist in teaching American History?
Can give quick reference to historical eras, events, people and times; organized around a chronology that provides links to previous eras; quotations from teacher section offer lesson warm-ups, great access to resources

What specifically does the site offer in assisting your teaching? Same as above, speeches and primary sources

Critically analyze each section of the site.

What are the best / poorest features of the site?
Best: structure; everything is well formed and easy to navigate, site page
Worst: primary source documents; site does not allow creation of history because it lacks a broad selection of documents that all students to form their own opinions; the site pre-interprets the knowledge so that it becomes just another textbook, home is "messy"

What needs improvement?
Primary source documents (see above)
Teacher section: sample lessons needed; links to educational sites based on that (whichever) subject/era/etc. or links to documents or to other knowledge bases (I hate to mention it, but the CNN site does this very well. Thought it keeps the viewer within its base – not a great thing – it provides heady connections and multiple source offerings.)
More links needed

What themes are present? What themes are missing?
Needs better articulation with state and national standards / themes (History, NCSS), integration with other social studies disciplines

What issues are present? What issues are missing?
Multicultural, popular culture are present, examples of controversy
More with controversy, alternative views of history, more issues in history, more with ealier history needed

What are the best ways to integrate the site in schools?

Design a course so that the students are critiquing the site. Give students research responsibilities so that they decide the validity and shortcomings of the site. Use the site as a project resource, learning station for project development

What lessons / units can be added?
see above

Conclusion

We are at a crossroads in social studies and history education, and the struggle continues. Should we continue with a transmission approach or move toward history and social education for transformation? Technology has a huge role to play in determining the direction. The increased and effective integration of technology in history and social studies education must continue to be addressed.

Web sites such as Gilda Lehrman (http://www.gliah.org) can only be as effective as those who design them and apply them. The ongoing focus group of teachers has continued with discussions and applications of the site in hopes of improving its design and application. We must allow all stakeholders input into integrating technology as a tool for history and social studies integration

The internet has the potential to play a great role in improving history and social studies education. Increased access to information is one thing, but what we do and allow students to do with that information will truly make the difference.

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